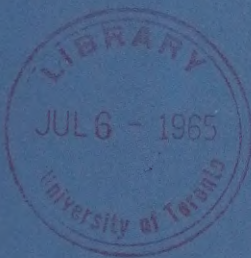


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ONTARIO ECONOMIC REVIEW



DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

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THE ONTARIO ECONOMY

High employment levels continued to reflect the general prosperity in Ontario. In April, the unemployment rate was 3.1%. Manufacturing levels are high with both motor vehicle production and steel output exceeding that of April, 1964.

Prices in the consumer sector have held relatively firm whereas in the wholesale sector a 0.9% increase was recorded in April. Moreover, preliminary figures for May indicate that wholesale price increases from April are in the order of 0.5%.

PRODUCTION

The seasonally adjusted Canadian Industrial Production Index was 223.8 in February, based on 1949 = 100. Though this was virtually the same as in January, there were several notable changes among the component indices.

The mining index dropped 1.7% as a result of declines in the production of gold, copper and nickel ores, and fuels including coal and petroleum. Increases took place in the production of iron ore, asbestos and natural gas.

Both the non-durable and the durable manufacturing indices remained close to those of January. Among the non-durables, increases in rubber products and textiles were offset by decreases in food and beverages, and petroleum and coal products. The more notable durable goods increases were recorded in the production of motor vehicles and parts, products of smelting and refining, and refrigerators and appliances.

Canadian automobile production in April was 71,113 units bringing the total for the first four months to 256,715 units. Compared to 1964, these levels were increases of 12% and 7% respectively. Truck production displayed higher gains with increases of 21% and 16% in a similar comparison.

Reflecting the strong demand from the manufacturing and construction sectors, steel production continued at capacity rates during April. In that month, steel ingot production was 779 thousand tons, an increase of 4% over April, 1964. Though this level is not quite that of January or March, it exceeds production during any month of 1964 or previous years. Pig iron production in April was 537 thousand tons. This was a slight decrease over April, 1964.

CONSTRUCTION

In Ontario, starts on new dwelling units numbered 3,552 in April. This is slightly lower than in April, 1964 on account of the relatively large increase in March. As a result, starts for the first four months are a modest 2% ahead of the comparable period last year.

In Metro Toronto, dwelling unit starts showed an increase of 14% from the first four months of 1964. On the other hand, starts in other Ontario centres declined 2%. As a result, the Metro Toronto proportion of total Ontario starts rose from 35% in the January to April period of 1964 to 39% this year.

In the Metropolitan centres in Ontario, the trend towards living in apartments and row houses was further demonstrated by recent statistics. In Toronto, apartment and row-house dwelling unit starts numbered 2,915 in the first four months of 1965, an increase of 28% from the same period last year. In contrast the number of starts for single-detached, semi-detached and duplex houses was 13% lower in a comparable comparison. In the surrounding towns outside Metro Toronto but within the Metro census area, the opposite was observed. Apartment and row housing starts showed a decrease of 52% compared to a 36% rise in housing starts.

Row and apartment starts and housing starts in five other metro centres displayed the following changes over the same period: Hamilton -67% and -13%, Kitchener -5% and -1%, London +96% and -8%, Ottawa-Hull +11% and -49% and Windsor over 100% and -8%.

Ontario business, industrial and engineering contracts awarded in April were valued at \$124.6 million on a seasonally adjusted basis. This was an increase of over \$10 million from March. For the first four months, the seasonally adjusted total was \$448.8 million, an increase of over 23% compared to last year.

LARGE CONSTRUCTION AWARDS PLACED
RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ million</i>	<i>Description</i>
Brantford	1.5	Tobacco plant
Fort William	2.5	High school
Kingston	1.9	University building
Kitchener	1.1	Apartment building
Ingersoll	2.0	Industrial plant
Niagara Falls	1.6	Hospital addition
North Bay	3.5	Hospital
North York Twp.	16.5	Apartment buildings
Sarnia	1.5	Polymer Corp. research addition
Scarborough Twp.	3.9	Apartment buildings
Toronto	7.0	Apartment buildings
Toronto	4.0	Office building
Percy Twp.	7.3	Medium-security institution

EMPLOYMENT AND INCOME

The Ontario labour force numbered 2,548 thousand in April, 1965. Unemployment was limited to 80 thousand or approximately 3.1% of the labour force. This was virtually no change from March. In contrast, the unemployment rate was 3.6% in April, 1964.

On a seasonally adjusted basis, labour income in Ontario totalled \$856 million in February, a fractional decrease from January. This was an increase of 7.7% from February last year. Using unadjusted data, the increase is over 8% of which 3.5% can be attributed to higher average wages and salaries and 5.1% to higher employment levels.

In a comparison of average weekly earnings in February, 1965 with those in February of the previous year, the manufacturing and trade sectors showed below average gains. The highest proportional gains were in the finance, insurance and real estate sectors (+7.8%), and in public utility operation (+5.9%).

PRICES

Based on 1949 = 100, the Canadian Consumer Price Index was 137.7 in April, an increase of 0.3% from March. Six of the seven components showed increases while the tobacco and alcohol index remained unchanged.

The April Wholesale Price Index for 30 Industrial Materials was 0.9% above that of March as a result of increased prices for structural shapes, tin, raw wool and beef hides. Small decreases were registered for cotton-seed oil, linseed oil, raw sugar, raw rubber and hogs.

The Canadian Farm Products Index for April was 228.7 based on 1935-39 = 100. This increase of 1.3% from March reflected a sharp 4% increase in the field products index offset by a slight decrease in the animal products index. Price increases took place in eastern markets for potatoes, rye, peas, barley and corn. Western market increases were mainly for potatoes and hay.

FINANCE

A slight tightening in the supply of loanable funds in all sectors of the Canadian money market occurred towards the end of April. Reflecting this condition, the day-to-day loan rate, which had opened the month at 3¼%, closed the month at a level of 3¾% to 3⅞%.

On light trading volume, prices of most outstanding issues comprising virtually all sectors of the Canadian bond markets tended to fluctuate within a very narrow and mixed range throughout April. The 1965-66 Federal Budget, brought down on April 26th, had little impact on bond prices despite its prime provision calling for a 10% reduction in the basic tax payable under the personal income tax law

— subject to a maximum reduction of \$600 per year. New Canadian bond financings for the first quarter of 1965 totalled \$1.47 billion, up 19.8% from last year's comparable total of \$1.22 billion.

There was a modest resurgence in demand for industrial equities listed on the Canadian stock exchanges during April. The Toronto Stock Exchange Industrial Index reached a then all-time closing high of 175.83 by mid-month easing slightly thereafter to close the month at a level of 174.97 — a gain nevertheless of some 3.30 points on Index over the month.

Canada's foreign exchange reserves increased by some \$12.4 million during April to close the month at a level of US \$2,566.5 million. This addition to our reserve position reflected the substantial increase in Canada's value of exports during the previous month and an additional volume of corporate borrowings being placed in the U.S. markets.

In terms of U.S. funds, the value of the Canadian dollar appreciated during April. Strength was particularly evident in the first half of April when the value of the Canadian dollar rose from its month-opening level of 92.52 cents to 92.83 cents on April 14th. Thereafter, slight price erosion occurred and by the end of the month the Canadian dollar was quoted at 92.63 cents.

FEDERAL BUDGET — 1965-66

Finance Minister Gordon's budget for 1965-66, presented to Parliament on April 26th, 1965, forecasts a deficit of \$300 million, based on estimated revenues of \$7.4 billion and expenditures of \$7.7 billion. This is the ninth consecutive year in which a deficit has been forecast. However, though the 1964-65 budget envisaged a deficit of \$455 million, it is now expected that this will be \$83 million, revenues for the year having exceeded all expectations because of the extent of Canada's economic growth.

It is anticipated that the 1965-66 operation of the Old Age Security Fund will result in a surplus of \$240 million, part of which will be applied to loan repayment and the balance to the programme for acceleration of old age pension payments.

Though a reduction of 10% in the basic rates for personal income tax was announced, no major revisions in the tax structure are contemplated, pending the publication of the report of the Royal Commission on Taxation. Several measures were introduced which not only extended the operating time for certain tax concessions, as well as broadening tax allowances for specified dependants, but also closed various loop-holes permitting tax evasion.

A major undertaking was that of the setting up of the Canada Development Corporation, its function being the investment of funds in industrial

opportunities. With an authorized capitalization of \$1 billion, it will be financed by government and public funds and the shares initially will cost \$5.00 each.

The reaction of the business community was one of disappointment in that no provision was made for either the reduction of corporation income taxes or for some amelioration of the 11% sales tax on construction materials, machinery, etc. The public at large welcomed the reduction in income tax rates though it was felt that the benefit accruing to the tax-payers in the lower income groups was very small.

FOREIGN TRADE

Advance trade statistics indicate that Canadian commodity imports in March this year were valued at \$731.1 million, a substantial increase over the \$576.0 million level of March, 1964. As a result, imports for the first quarter were 12% higher than in the comparable period of 1964.

At \$540.1 million, imports from the United States in March were 31% higher than a year ago. March imports from the United Kingdom rose only 9% to \$53.7 million. Imports from other Commonwealth and preferential rate countries dropped 16% to a \$21.5 million level. Purchases from all other countries increased 29% to \$115.8 million.

On the other hand, exports this year have not shown the same proportional increase in either March or the first quarter. Total exports in March were valued at \$706.4 million, an 18% increase over March, 1964.

During the first three months, exports were valued at \$1,850.5 million, a modest 4% increase over the comparable period last year. As a result, the export balance for the first quarter was \$4.7 million as compared to an export balance of \$129.1 million in the January to March period in 1964.

ECONOMIC OBJECTIVES OF ONTARIO

In the recent presentation of the estimates of the Ontario Department of Economics and Development, the Hon. S. J. Randall took the opportunity to assert the economic goals towards which Ontario is working. These goals reflect the implications for Ontario of national achievement of the 1970 targets indicated by the Economic Council of Canada.

- (1) An average of at least 75,000 new jobs a year.
- (2) An unemployment rate of no more than 2% by 1970.
- (3) An average productivity increase of 2.5% per year.
- (4) A sharp increase in exports of manufactured goods.

- (5) An overall annual growth rate in gross provincial product of at least 5.5% in constant dollars.

The Minister said that over the past two years Ontario's economic growth had already matched the target rates. Reviewing the employment record, the Minister pointed out that prosperity was not limited to a few metropolitan centres but was spread across the whole province. In February this year only 2 of the 35 National Employment Service Labour Markets in the province had substantial labour surpluses.

The Minister pointed out that increased economic activity necessitated both higher education and better health and living conditions for a growing labour force. The fact that new skills are consistently in demand puts a premium on education.

The attainment of the goals for 1970 is dependent on the realization by all concerned that the trend toward proportionally reduced employment in the goods sector and greater employment in the service sector will definitely continue. To emphasize this point, the Minister presented a series of related tables prepared by the Department of Economics and Development. They may be obtained by writing to this Department.

Two of the three tables, reproduced below, compare the structure of employment in 1961 and 1970, if the targets are met. The first table clearly sets out the expected growth of 56,700 per year in the service sector as compared to an annual average employment increase of 17,300 in the goods sector. Thus the proportion of total Ontario employment in the goods sector should decline from 46.6% in 1961 to 40.6% in 1970 (Table 2).

The principal absolute increases will occur in the manufacturing, trade and community service sectors. The importance of increased manufacturing output to the achievement of the targets is illustrated by a required average increase of manufacturing employment of 15,200 a year. In the wholesale and retail trades, the annual increase should average 14,800. Community service employment, including education and health services should experience a similar rise of 14,500 per year.

All the industries in which employment will decrease are in the extractive goods sector. Employment levels in agriculture, forestry and mining are expected to show annual average declines of 3,800, 400 and 400 respectively.

The third table illustrates the distribution by industry of the total value of production at factor cost in Ontario for 1956, 1963 and 1970. When read with the second table, this data indicates the relative increases in productivity expected for different industries.

ONTARIO POTENTIAL EMPLOYMENT BY INDUSTRY 1961-1970

	Census Report 1961 000's	Potential 1970 000's	Average Annual Change 1961-70 000's
GOODS SECTOR			
Agriculture	168.8	135	-3.8
Fishing and Trapping	2.2	3	0.1
Forestry	16.7	13	-0.4
Mining	42.9	39	-0.4
Total Extractive Goods	229.9	190	-4.4
Manufacturing	627.1	764	15.2
Construction	123.8	175	5.7
Electric Power and Gas Utilities	26.5	32	0.6
Water and Other Utilities	2.5	4	0.2
Total Secondary Goods	779.9	975	21.7
TOTAL GOODS SECTOR	1,009.7	1,165	17.3
SERVICE SECTOR			
Transportation, Storage and Communication ⁽¹⁾	140.0	192	5.8
Trade (wholesale and retail)	306.5	440	14.8
Finance, Insurance and Real Estate	91.3	130	4.3
Public Administration and Defence ⁽²⁾	196.8	239	4.7
Community Services	205.2	336	14.5
Recreation Services	14.6	33	2.0
Business Services	34.6	60	2.8
Miscellaneous Services	19.3	33	1.5
TOTAL SERVICE SECTOR	1,129.1	1,639	56.7
TOTAL EMPLOYMENT ⁽³⁾	2,321	2,955	70.4 ⁽³⁾

⁽¹⁾ Post office is included in Public Administration.

⁽²⁾ The sum of the components is not equal to total employment as the latter figure for 1961 is the annual average of the monthly labour force survey.

⁽³⁾ The figure 70.4 thousand is the average annual increase for the period 1961-1970. For the period 1963-1970, the average will be 75,000 new jobs per year.

PERCENTAGE DISTRIBUTION OF EMPLOYMENT IN ONTARIO

	1951	1961	1970
GOODS SECTOR			
Agriculture	11.7	7.7	4.7
Fishing and Trapping	0.1	0.1	0.1
Forestry	1.2	0.8	0.5
Mining	1.7	1.9	1.4
Total Extractive Goods	14.7	10.5	6.6
Manufacturing	34.3	28.7	26.6
Construction	5.8	5.7	6.1
Electric Power and Gas Utilities	1.4	1.2	1.1
Water and Other Utilities	0.3	0.1	0.1
Total Secondary Goods	41.9	35.7	34.0
TOTAL GOODS SECTOR	56.7	46.2	40.6
SERVICE SECTOR			
Transportation, Storage and Communication ⁽¹⁾	6.8	6.4	6.7
Trade (wholesale and retail)	12.5	14.0	15.3
Finance, Insurance and Real Estate	3.3	4.2	4.5
Public Administration and Defence ⁽²⁾	6.8	9.0	8.3
Community Services	6.4	9.4	11.7
Recreation Services	0.6	0.7	1.2
Business Services	1.1	1.6	2.1
Personal Services	4.7	5.5	6.1
Miscellaneous Services	0.2	0.9	1.2
TOTAL SERVICE SECTOR	42.3	51.6	57.2
Unspecified	1.0	2.2	2.2
TOTAL EMPLOYMENT	100.0	100.0	100.0

⁽¹⁾ Post Office is included in Public Administration.

PERCENTAGE DISTRIBUTION BY INDUSTRY OF TOTAL VALUE OF PRODUCTION AT FACTOR COST IN ONTARIO, 1956, 1963 AND POTENTIAL 1970 (Based on current value dollars)

	1956	1963	1970
GOODS SECTOR			
Agriculture, Fishing and Trapping	3.8	3.5	2.6
Forestry	0.7	0.4	0.2
Mining	3.3	2.9	2.3
Total Extractive Goods	7.7	6.8	5.1
Manufacturing	35.3	32.4	31.0
Construction	5.6	4.7	5.7
Public Utilities	3.5	3.6	3.5
Total Secondary Goods	44.4	40.7	40.3
TOTAL GOODS SECTOR	52.0	47.5	45.4
SERVICE SECTOR			
Transportation, Storage and Communication	7.7	7.1	5.6
Trade (wholesale and retail)	13.4	13.0	12.6
Finance, Insurance, Real Estate and Services	20.6	25.1	29.2
Public Administration and Defence	6.3	7.3	7.2
TOTAL SERVICE SECTOR	48.0	52.5	54.6
TOTAL GROSS DOMESTIC PRODUCT AT FACTOR COST	100.0	100.0	100.0

THE INSTITUTIONAL INVESTOR AND THE SECURITIES MARKET

ROLAND W. JONES, JR.

Economist, Financial Research Branch

ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Total assets of Canada's financial institutions, estimated in excess of \$40 billion at present, have not only doubled over the past decade but have grown at a rate slightly above that of Canada's Gross National Product. It is not surprising therefore, that the very magnitude of such assets and the extent of control which the financial institutions exercise over our nation's capital resources have given rise to considerable concern as to productivity of such funds, or in other words, the use to which they are being put. Virtually every facet of the composition of financial institutions and their operations was examined in considerable detail by the recent Royal Commission on Banking and Finance. Similarly, these areas were highlighted by the Economic Council of Canada in its first Annual Review and also specifically mentioned by the Governor of the Bank of Canada in his latest Annual Report.

While attention in each of these reports was essentially focussed upon the respective financial institutions' scope of operations or structural composition, it appeared to us that only limited consideration was given to their investment habits and practices. Accordingly, in this article an attempt is made to evaluate what impact these habits have on our securities markets. We approached this task by aspiring to answer the following questions:

- ... Do they provide a ready source of capital to new issue financings?
- ... Does the institutional investors' position serve to otherwise disrupt the market's stability?
- ... Do they limit the supply and thus availability of securities in the open market and thereby reduce the market's resilience?
- ... Do they limit their investments to only the high quality issues in the stock market?
- ... Do they constitute a channel through which the proportion of foreign equity holdings may be effectively reduced?
- ... Do these investors actively change their investment position between the various markets of financing media?

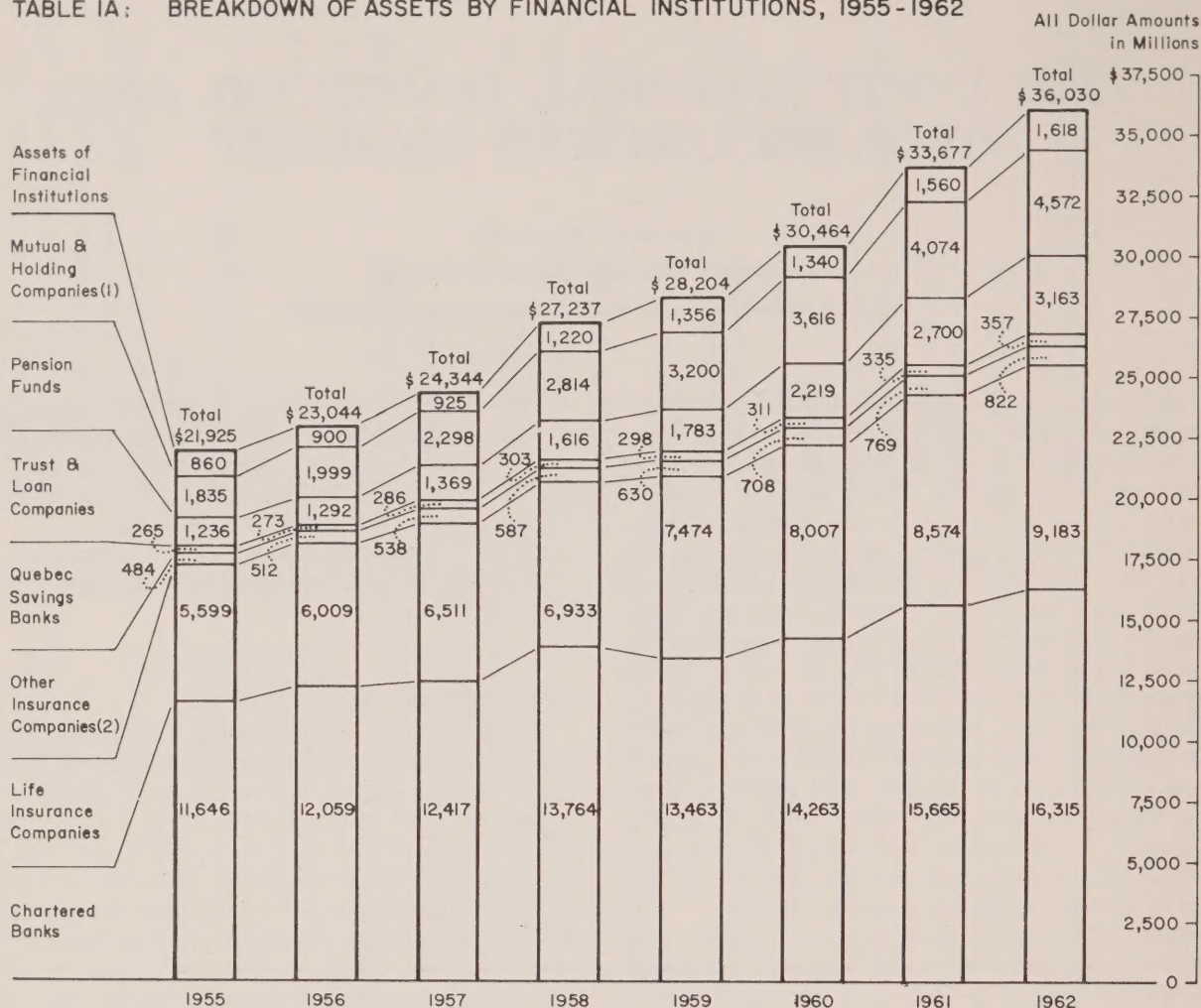
- ... What will be the invested portfolio capital requirements of Canada by 1970, projecting a \$71.5 billion level of Gross National Product?
- ... Through which investors and in what proportions should this capital be supplied?
- ... What is generally going to be the impact of the Canada Pension Plan upon the securities market in the future?

CANADA'S FINANCIAL INSTITUTIONS

The institutions falling within this category and the magnitude of their assets is illustrated in Tables 1A & 1B. The period covered is essentially limited — prior to 1955 and following 1962, data is either not available or else in a form which may not be applied on a comparative basis. Virtually each type of financial institution has contributed to the growth of the entire system. Foremost amongst these is the rate of growth which has been accorded the trust and loan companies and pension funds. Over this eight year period, the average rate of expansion in the assets of trust and loan companies has been no less than 12.4 per cent and was 17.1 per cent for the fiscal year of 1962. Pension funds, on the other hand, expanded at an equivalent annual rate of 12.5 per cent over this period; the year-to-year increase for 1962, however, was only 7.0 per cent. The average rate of increase in total assets for all types of institutions together nevertheless, was noticeably similar to this 7.0 per cent level at the overall rate of 6.8 per cent.

Essentially, the very nature of these financial institutions deems that they must commit available funds to an income earning capacity as early as possible. This necessitates that most of these funds are directed into the securities markets. Accepting this truism we can now establish whether or not this growth in dollar assets either exceeds or is less than the new financing requirements of our principal borrowers, namely, the Government of Canada, the various provinces, municipalities and corporations.

TABLE IA: BREAKDOWN OF ASSETS BY FINANCIAL INSTITUTIONS, 1955-1962



(1) F. P. Guide to Investment Companies

(2) Supt. of Insurance Annual Report

Source: Bank of Canada Statistical Supplement

TABLE 1-B
GROWTH IN TOTAL NET ASSETS OF CANADA'S FINANCIAL INSTITUTIONS,
1955 THROUGH 1962

PERCENTAGE YEAR TO YEAR CHANGE

	1956 over 1955	1957 over 1956	1958 over 1957	1959 over 1958	1960 over 1959	1961 over 1960	1962 over 1961	Average Annual Change 1955-1962
Chartered Banks	3.5	3.0	10.8	-2.2	5.9	9.8	4.1	3.8
Life Insurance Companies	7.3	8.4	6.5	7.8	7.1	7.1	7.1	7.3
Other Insurance Companies	5.8	5.1	9.1	7.3	12.4	8.6	6.9	7.6
Quebec Savings Banks	3.0	4.8	5.9	-1.7	4.4	7.7	6.6	3.8
Trust & Loan Companies	4.5	6.0	18.0	10.3	24.5	21.7	17.1	12.4
Pension Funds	8.9	15.0	22.5	13.7	13.0	12.7	7.0	12.5
Mutual Funds & Holding Co's.	4.6	2.7	31.9	11.1	-1.2	16.4	3.7	5.8
Total	5.1	5.6	11.9	3.6	8.0	10.5	7.0	6.8

All average annual rates of change are calculated by geometric averaging.

TABLE 2

GOVERNMENT OF CANADA DIRECT AND GUARANTEED BONDS

INSTITUTIONAL HOLDINGS

	Total Inst. Holdings	Chartered Banks	Life Insur. Co's.	Other Insur. Co's.	Quebec Savings Banks	Loan & Trust Co's.	Pension Funds	Federal, Prov. & Munic. Gov'ts	General Public Holdings	Foreign Holdings	Total Value of Securities Outstanding
1962 (\$ million)	9,809	3,371	677	499	32	392	610	4,228	8,685	954	19,448
% of Total Value	50.4	17.3	3.5	2.6	0.2	1.3	2.0	28.1	37.7	4.0	100.0
% chg. over prior year	-11.3	-11.0	1.5	2.9	-13.5	2.6	1.3	1.4	28.6	16.3	4.4
% of all Insts. held	100.0	34.4	6.9	5.1	0.3	4.0	6.2	43.1			
1961 (\$ million)	11,063	3,789	677	485	37	382	602	4,170	6,753	820	18,636
% of Total Value	59.4	20.3	3.6	2.6	0.2	2.0	3.1	21.7	44.7	4.9	100.0
% of chg. over year	12.4	24.1	-4.6	2.3	-5.1	18.3	-8.1	-1.9	-4.8	1.5	5.0
% of all Insts. held	100.0	34.2	6.0	4.4	0.3	3.5	5.4	37.7			
1960 (\$ million)	9,845	3,052	699	474	39	323	655	4,252	7,094	808	17,747
% of Total Value	55.5	17.2	3.9	2.7	0.2	2.0	3.2	22.4	36.2	4.4	100.0
% of chg. over year	0.9	9.2	13.3	8.5	39.3	34.0	10.8	1.3	6.6	11.9	3.6
% of all Insts. held	100.0	31.0	7.1	4.8	0.4	3.3	6.7	43.2			
1959 (\$ million)	9,756	2,795	617	437	28	241	591	4,196	6,657	722	17,135
% of Total Value	56.9	16.3	3.6	2.6	0.2	1.8	3.7	24.0	40.0	4.5	100.0
% of chg. over year	-5.7	-20.6	10.8	17.8	nil	5.2	15.7	-6.0	22.5	14.2	4.4
% of all Insts. held	100.0	28.6	6.3	4.5	0.3	2.5	6.1	43.0			
1958 (\$ million)	10,349	3,521	557	371	28	229	511	4,464	5,435	632	16,416
% of Total Value	63.0	21.4	3.4	2.3	0.2	1.4	3.4	24.5	38.9	4.2	100.0
% of chg. over year	9.9	33.3	3.5	0.8	-28.2	26.5	6.2	2.6	4.4	17.5	8.2
% of all Insts. held	100.0	34.0	5.4	3.6	0.3	2.2	4.9	43.1			
1957 (\$ million)	9,420	2,641	538	368	39	181	481	4,349	5,207	538	15,165
% of Total Value	62.2	17.4	3.5	2.4	0.3	1.4	3.1	27.2	33.2	3.8	100.0
% of chg. over year	-1.2	4.6	-10.0	5.4	-13.3	2.3	29.3	-3.7	1.7	-7.7	-0.5
% of all Insts. held	100.0	28.0	5.7	3.9	0.4	1.9	5.1	46.2			
1956 (\$ million)	9,533	2,524	598	349	45	177	372	4,518	5,118	583	15,234
% of Total Value	62.6	16.6	3.9	2.3	0.3	1.2	3.2	28.7	34.3	3.8	100.0
% of chg. over year	2.3	-19.2	-23.6	4.5	-18.2	-14.1	14.1	0.6	-15.2	-9.9	-4.8
% of all Insts. held	100.0	26.5	6.3	3.7	0.5	1.9	3.9	47.4			
1955 (\$ million)	9,320	3,124	783	334	55	206	326	4,492	6,033	647	16,000
% of Total Value	58.3	19.5	4.9	2.1	0.3	1.2	2.4	29.7	33.6	3.8	100.0
% of all Insts. held	100.0	33.5	8.4	3.6	0.6	2.2	3.5	48.2			

SOURCE: Bank of Canada Statistical Supplement.

TABLE 3

PROVINCIAL BONDS

	INSTITUTIONAL HOLDINGS										Total Value of Securities Outstanding
	Total Inst. Holdings	Chartered Banks	Life Insur. Co's.	Other Insur. Co's.	Quebec Savings Banks	Loan & Trust Co's.	Pension Funds	Federal, Prov. & Munic. Gov'ts	General Public Holdings	Foreign Holdings	
1962 (\$ million)	4,707	407	917	295	83	167	1,482	1,356	2,300	2,013	9,020
% of Total Value	52.2	4.5	10.2	3.3	0.9	1.9	16.4	15.0	25.5	22.3	100.0
% chg. over prior year	10.4	15.6	11.4	4.2	—	4.4	13.1	8.9	6.3	13.7	10.0
% of all Insts. held	100.0	8.6	19.5	6.3	1.8	3.5	31.5	28.8			
1961 (\$ million)	4,262	352	823	283	89	160	1,310	1,245	2,164	1,771	8,197
% of Total Value	52.0	4.2	10.0	3.5	1.1	2.0	16.0	15.2	26.4	21.6	100.0
% of chg. over year	17.4	8.6	56.5	8.8	2.3	22.1	17.5	4.9	39.1	6.5	19.7
% of all Insts. held	100.0	8.3	19.3	6.6	2.1	3.8	30.7	29.2			
1960 (\$ million)	3,630	324	526	260	87	131	1,115	1,187	1,556	1,663	6,849
% of Total Value	53.0	4.7	7.7	3.8	1.3	1.9	16.3	17.3	22.7	24.4	100.0
% of chg. over year	6.3	—	13.9	7.9	—	8.3	11.1	3.0	16.6	2.7	7.5
% of all Insts. held	100.0	8.9	14.5	7.2	2.4	3.6	30.7	32.7			
1959 (\$ million)	3,416	346	462	241	90	121	1,004	1,152	1,334	1,616	6,366
% of Total Value	53.7	5.4	7.3	3.8	1.4	1.9	15.8	18.1	20.9	25.4	100.0
% of chg. over year	3.7	—16.6	11.6	8.6	—11.8	—	13.4	2.5	12.5	23.6	10.0
% of all Insts. held	100.0	10.1	13.5	7.1	2.6	3.5	29.4	33.7			
1958 (\$ million)	3,295	415	414	222	102	133	885	1,124	1,186	1,307	5,788
% of Total Value	56.9	7.2	7.2	3.8	1.8	2.3	15.3	19.4	20.5	22.6	100.0
% of chg. over year	12.7	45.6	—	11.0	18.6	51.1	7.3	9.7	13.1	9.3	12.0
% of all Insts. held	100.0	12.6	12.6	6.7	3.1	4.0	26.9	34.1			
1957 (\$ million)	2,924	285	415	200	86	88	825	1,025	1,049	1,196	5,169
% of Total Value	56.5	5.5	8.0	3.9	1.7	1.7	16.0	19.8	20.3	23.1	100.0
% of chg. over year	10.4	5.9	6.7	23.5	3.6	7.3	20.8	4.6	19.0	9.4	12.0
% of all Insts. held	100.0	9.7	14.2	6.8	2.9	3.0	28.2	35.1			
1956 (\$ million)	2,648	269	389	162	83	82	683	980	875	1,093	4,616
% of Total Value	57.4	5.8	8.4	3.5	1.8	1.8	14.8	21.2	19.4	23.7	100.0
% of chg. over year	8.0	—16.5	9.9	14.1	3.8	—16.3	28.9	5.9	19.9	22.8	13.3
% of all Insts. held	100.0	10.2	14.7	6.1	3.1	3.1	25.8	37.0			
1955 (\$ million)	2,451	322	354	142	80	98	530	925	733	890	4,074
% of Total Value	60.2	7.9	8.7	3.5	2.0	2.4	13.0	22.7	18.0	21.8	100.0
% of all Insts. held	100.0	13.1	14.4	5.8	3.3	4.0	21.6	37.7			

Source: Bank of Canada Statistical Supplement.

GOVERNMENT BONDS

The Government of Canada has steadily increased its financing requirements over the years under review. This need for capital basically has arisen out of the slow rate of economic expansion that has so characterized our nation's development in the period under review. Canada bonds outstanding amounted to exactly \$16.0 billion in 1955, but by 1962 had arisen to a total of \$19.45 billion — an average annual increase of some 2.4 per cent.

The position which the institutional investors had assumed in the distribution of these bonds in 1962 amounted to 50.4 per cent of their total as compared with 58.3 per cent in 1955. Included in the holdings of institutional investors, however, were the Canada bonds held by all levels of Government. These totalled \$4.2 billion or 43.1 per cent of all institutional holdings in 1962 as compared to \$4.5 billion or 48.2 per cent of the institutional holdings in 1955. As an outcome, it is thus apparent that the market for Canada bonds, while dependent to a considerable extent upon the institutional investor, is tending to become less dependent upon the respective governments. (See Table 2).

The institutional investor, in common with most investors, aspires to maximize the return of investments while maintaining the highest degree of safety by way of quality. Government of Canada bonds possess this prime quality, but as a consequence are sold at lower yields. Other classes of bond, reflecting their lesser financial security, stability and condition, render higher yields. The difference in yields is referred to as their yield differential and is subject to fluctuation according to the composite of business and economic factors.

While most of these financial institutions are required by regulation to maintain a stated minimum proportion of their assets in holdings of, or comparable to, Government of Canada bonds, there has been a very evident tendency to direct their funds into other classes of holdings. Institutions, since 1955 through 1962, have consequently only increased their holdings of Government bonds at an annual rate of 1.8 per cent.

Holdings by foreign investors, despite the fact that their commitments in Government of Canada bonds are relatively small, amounting to only \$954 million in 1962 (5.0 per cent of all Government of Canada bonds outstanding), have been increasing their purchases of these securities at an annual rate of almost 2.7 per cent a year.

The participation of the public in Government of Canada bonds has meanwhile changed significantly. Their purchases have increased from a total of \$6.0 billion in 1955 to \$8.7 billion in 1962. While this volume of holdings is large, and now represents some 45 per cent of all Government of Canada debt outstanding, it is pertinent to note that almost 83

per cent of this increase is attributable to a net increase of \$2,187 million arising out of the sales of Canada Savings Bonds. The amount of Canada Savings Bonds outstanding in 1955 which totalled only \$2,433 million, increased to a level of \$4,620 million by 1962. This represented a 9.2 per cent average annual increase over the period, while the public's holdings of all Government of Canada bonds had increased at an average annual rate of only 1.7 per cent.

PROVINCIAL BONDS

The rate at which provincial and provincially-guaranteed bond financings have increased and their pattern of distribution has followed a somewhat more pronounced though very similar trend to that already described for Government of Canada bonds. While the volumes involved are of a lesser magnitude, the overall rate of increase has been decidedly greater. From 1955 through 1962, the dollar amount of these bonds outstanding has more than doubled from \$4.1 billion to slightly over \$9 billion, an increase which is equivalent to more than an 11.6 per cent annual increase in borrowing activities. This marked increase in provincial financial requirements is attributable to a large degree to the growth in provincial expenditures in such areas as education, transportation, health and public welfare and other fields of direct provincial responsibility.

From 1955 through 1962, institutional investors have generally been increasing their position in these bonds as a proportion of their total net assets. For this period, their purchases and therefore corresponding holdings, have risen from \$2.5 billion to \$4.7 billion or at a rate of 8.9 per cent per year; this rate was considerably larger than their annual rate of expansion of total assets. Despite this apparent trend towards increasing their overall proportion of provincial bond holdings in relation to all assets, it nevertheless is pertinent to point out that, as a holder of all provincial bonds outstanding, the position of the institutional investor has been declining. In relation to the value of these bonds outstanding, their proportion has dropped from 60.2 per cent in 1955 to 52.5 per cent by 1962. Again, as has been the practice in respect to each class of bonds, provincial and municipal governments' holdings have been included as part of institutional holdings. Their proportion of institutional holdings have been on the decline, having declined from 37.7 per cent in 1955 to only 28.8 per cent by 1962. This decline was, however, more than offset by increased net purchases on the part of pension funds which increased their proportion of holdings from 21.6 per cent in 1955 to 31.5 per cent in 1962.

As a consequence of the overall decline in the proportion of all institutional holdings, financing

TABLE 4

MUNICIPAL BONDS

	INSTITUTIONAL HOLDINGS										Total Value of Securities Outstanding
	Total Inst. Holdings	Chartered Banks	Life Insur. Co's.	Other Insur. Co's.	Quebec Savings Banks	Loan & Trust Co's.	Pension Funds	Prov. & Munic. Gov'ts	General Public Holdings	Foreign Holdings	
1962 (\$ million)	2,091	250	615	134	39	102	470	481	1,123	1,155	4,369
% of Total Value	47.9	5.7	14.1	3.1	0.9	2.3	10.8	11.0	25.7	26.4	100.0
% chg. over prior year	6.5	8.2	2.3	3.9	-11.4	13.3	6.8	13.1	5.9	11.5	7.6
% of all Insts. held	100.0	12.0	29.4	6.4	1.9	4.9	22.5	23.0			
1961 (\$ million)	1,964	231	601	129	44	90	440	429	1,060	1,036	4,060
% of Total Value	48.4	5.7	14.8	3.2	1.1	2.2	10.8	10.6	26.1	25.5	100.0
% of chg. over year	8.4	11.1	9.9	6.6	7.3	28.6	13.1	-1.6	17.3	1.2	8.6
% of all Insts. held	100.0	11.8	30.6	6.6	2.2	4.6	22.4	21.8			
1960 (\$ million)	1,812	208	547	121	41	70	389	436	904	1,024	3,740
% of Total Value	48.4	5.6	14.6	3.2	1.1	1.9	10.4	11.7	24.2	27.4	100.0
% of chg. over year	9.8	2.0	7.9	10.0	-12.8	29.6	14.4	12.1	12.0	12.3	11.0
% of all Insts. held	100.0	11.5	30.2	6.7	2.3	3.9	21.5	24.1			
1959 (\$ million)	1,651	204	507	110	47	54	340	389	807	912	3,370
% of Total Value	49.0	6.1	15.0	3.3	1.4	1.6	10.1	11.5	23.9	27.1	100.0
% of chg. over year	8.3	4.6	11.2	6.8	-11.3	-3.6	10.0	10.2	6.5	16.9	10.0
% of all Insts. held	100.0	12.4	30.7	6.7	2.8	3.3	20.6	23.6			
1958 (\$ million)	1,525	195	456	103	53	56	309	353	758	780	3,063
% of Total Value	49.8	6.4	14.9	3.4	1.7	1.8	10.1	11.5	24.7	25.5	100.0
% of chg. over year	12.0	16.1	6.8	6.2	1.9	19.1	11.2	20.5	9.9	18.5	13.0
% of all Insts. held	100.0	12.8	29.9	6.8	3.5	3.7	20.3	23.1			
1957 (\$ million)	1,362	168	427	97	52	47	278	293	690	658	2,710
% of Total Value	50.2	6.2	15.8	3.6	1.9	1.7	10.3	10.8	25.5	24.3	100.0
% of chg. over year	5.3	-9.2	7.0	14.1	-7.1	-2.1	12.1	7.3	18.4	19.6	11.7
% of all Insts. held	100.0	12.3	31.4	7.1	3.8	3.5	20.4	21.5			
1956 (\$ million)	1,294	185	399	85	56	48	248	273	583	550	2,427
% of Total Value	53.3	7.6	16.4	3.5	2.3	2.0	10.2	11.2	24.0	22.7	100.0
% of chg. over year	5.1	-15.1	6.7	11.8	-1.8	-11.1	24.0	8.3	11.7	22.2	10.2
% of all Insts. held	100.0	14.3	30.8	6.6	4.3	3.7	19.2	21.1			
1955 (\$ million)	1,231	218	374	76	57	54	200	252	522	450	2,203
% of Total Value	55.9	9.9	17.0	3.4	2.6	2.5	9.1	11.4	23.7	20.4	100.0
% of all Insts. held	100.0	17.7	30.4	6.2	4.6	4.4	16.2	20.5			

SOURCE: Bank of Canada Statistical Supplement.

the balance of additional provincial bond market borrowing was assumed by the general public and foreign investors. In satisfying this capital requirement, the pattern of distribution for provincial bonds has found public ownership increasing from \$733 million in 1955 to some \$2.3 billion by 1962, or at an annual rate of about 15.9 per cent. In terms of outstanding provincial bond distribution, this increase represented a holding proportion of 25.5 per cent in 1962 as compared to 18.0 per cent for 1955.

Foreign investment, on the other hand, increased from a total of \$890 million in 1955 to slightly over \$2 billion in 1962. This amounted to an annual average increase of 10.2 per cent for the period or, as a proportion of holdings, equivalent to an increase from 21.8 per cent to 22.3 per cent (See Table 3).

MUNICIPAL BONDS

New capital requirements of Canadian municipalities have generally tended to expand at a consistently high rate since 1955. Their net borrowings on the securities markets have doubled as their amounts outstanding in 1962 totalled \$4,369 million as compared to \$2,203 million for the year 1955. The annual average increase of 10.2 per cent which this represents was no doubt fostered by our economy's recent development which has been particularly characterized by large capital expenditures in the industrialized and government sectors of our society and the continued increase in, and relocation of, our population into these areas. Associated with any and all capital expenditures and population concentrations is the necessity for the municipality to provide various types of facilities, be it educational, public works, etc., to service them. As long as a municipal area is able to attain a noteworthy and hearty rate of growth without a corresponding rate of increase in revenue resources their requirements for additional capital will continue to expand.

Municipal bonds, offering a relatively higher yield than that available from Government of Canada and most provincial or provincially guaranteed bonds, have proven themselves to be an attractive investment to the institutional investor. The net annual increase in the holdings of these bonds by the institutional investor has been some 7.6 per cent—a rate exceeding that at which institutional assets have been increasing. This annual increase in institutional holdings of municipal bonds has, however, again been lower than the rate at which the municipalities have been borrowing. Accordingly, it follows that the institutions have provided a less than proportional amount of capital than they did in 1955. The decline in actual proportions was from a level of 55.9 per cent in 1955 to one of only 47.9 per cent in 1962. The institutional sector primarily responsible for the overall decline

was the chartered banks, whose proportion of institutional holdings of municipal bond issues had declined to only 12.0 per cent in 1962 from a level of 17.7 per cent in 1955.

The higher yields available on municipal bonds, as previously mentioned, meanwhile had prompted increased purchases by foreign investors. The result was an increase in their holdings, from a level of only \$450 million in 1955 to 1962's total of \$1,155 million, or at a rate of some 17.3 per cent per year.

Public ownership over this eight-year period, in contrast, experienced only a very minor proportional increase. In 1962, the total of these bonds in public hands amounted to \$1,123 million, or 25.7 per cent of all municipal bonds outstanding as compared to \$522 million, or 23.7 per cent for the year 1955 (See Table 4).

CORPORATE BONDS

The corporations' inability to generate sufficient internal funds to meet their capital requirements led to their increasing dependence upon external sources at a substantial annual rate throughout the period 1955-1962. This was a period essentially characterized by slow growth accompanied by technological change and product innovation. In acquiring this financing, the corporation is able to utilize both equity and debt financing. The relationship of one media to another, however, is generally in such a manner as to achieve the greatest degree of financial leverage without unnecessarily increasing their respective risks. The actual proportion for those corporations that are leveraged, thus depends upon the corporation's individual circumstances and corresponding industry characteristics. Overall, new corporate bond flotations for the eight years, 1955 through 1962, resulted in their value having increased from \$4.6 billion to almost \$8.0 billion, or at an annual average rate of 4.3 per cent. In terms of leverage, with corporate equity having increased from a book value of \$22.8 billion to \$38.1 billion over the same period, this resulted in a bond-equity ratio of 1 to 4.5. In 1955, this bond to equity leverage ratio was at a level of 1 to 5.0, but subsequently it increased to 1 to 4.8 for 1962.

The position assumed and thus maintained by the institutional investors in corporate bonds has experienced only a very modest proportional decline over this period. Their holdings in this respect declined from 52.2 per cent to 47.1 per cent of total corporate bonds outstanding despite an increase in dollar value, from \$2.4 billion to just under \$3.8 billion or at the annual expansionary rate of 5.5 per cent. The institutional investors' failure to increase their holdings of corporate bonds at a pace comparable to the overall increase in the value of these bonds largely resulted from both chartered banks, and life insurance companies having increased

TABLE 5

CORPORATE BONDS

	INSTITUTIONAL HOLDINGS										Foreign Holdings	Total Value of Securities Outstanding
	Total Inst. Holdings	Chartered Banks	Life Insur. Co's.	Other Insur. Co's.	Quebec Savings Banks	Loan & Trust Co's.	Pension Funds	Prov. & Munic. Gov'ts	General Public Holdings			
1962 (\$ million)	3,756	457	2,005	158	26	254	725	231	1,225	2,994	7,975	
% of Total Value	47.1	5.7	25.1	2.0	0.3	3.1	9.1	2.8	15.4	37.5	100.0	
% chg. over prior year	6.2	— 3.8	4.5	8.2	4.0	— 0.2	14.4	166.0	13.5	12.1	9.5	
% of all Insts. held	100.0	12.2	53.4	4.2	0.7	6.8	19.3	6.2				
1961 (\$ million)	3,536	470	1,918	146	25	257	634	87	1,079	2,670	7,285	
% of Total Value	48.5	6.5	26.3	2.0	0.3	3.5	8.7	1.2	14.8	36.7	100.0	
% of chg. over year	— 0.8	— 0.6	— 3.3	— 2.7	nil	14.7	8.4	45.0	— 20.6	5.5	— 2.3	
% of all Insts. held	100.0	13.3	54.2	4.1	0.7	7.3	17.9	2.3				
1960 (\$ million)	3,564	473	1,983	150	25	224	585	60	1,359	2,532	7,455	
% of Total Value	47.8	6.3	26.6	2.0	0.3	3.0	7.8	0.8	18.2	34.0	100.0	
% of chg. over year	6.2	— 7.6	3.1	13.6	19.0	40.0	14.4	50.0	8.0	0.5	4.5	
% of all Insts. held	100.0	13.3	55.6	4.2	0.7	6.3	16.4	1.7				
1959 (\$ million)	3,356	512	1,924	132	21	160	508	40	1,258	2,520	7,134	
% of Total Value	47.0	7.2	27.0	1.9	0.3	2.2	7.1	0.6	17.6	35.3	100.0	
% of chg. over year	4.4	— 7.6	3.6	6.5	16.7	22.1	16.5	nil	— 4.0	1.7	1.9	
% of all Insts. held	100.0	15.3	57.3	3.9	0.6	4.8	15.1	1.2				
1958 (\$ million)	3,214	554	1,858	124	18	131	436	40	1,310	2,477	7,001	
% of Total Value	45.9	7.9	26.5	1.8	0.3	1.9	6.2	0.6	18.7	35.4	100.0	
% of chg. over year	8.9	8.8	6.2	22.8	5.9	12.0	18.6	— 39.4	16.9	9.4	10.5	
% of all Insts. held	100.0	17.2	57.8	3.9	0.6	4.1	13.6	1.2				
1957 (\$ million)	2,950	509	1,749	101	17	117	355	66	1,121	2,263	6,334	
% of Total Value	46.6	8.0	27.6	1.6	0.3	1.8	5.6	1.0	17.7	35.7	100.0	
% of chg. over year	11.1	— 0.2	9.3	20.2	13.3	15.8	28.2	43.5	23.7	26.0	18.2	
% of all Insts. held	100.0	17.3	59.3	3.4	0.6	4.0	12.0	2.2				
1956 (\$ million)	2,656	510	1,600	84	15	101	277	46	906	1,796	5,359	
% of Total Value	49.6	9.5	29.9	1.6	0.3	1.9	5.2	0.9	16.9	33.5	100.0	
% of chg. over year	11.8	5.8	9.6	16.7	— 6.3	14.8	38.5	— 2.1	43.4	16.2	17.7	
% of all Insts. held	100.0	19.2	60.2	3.2	0.6	3.8	10.4	1.7				
1955 (\$ million)	2,375	482	1,460	72	16	88	200	47	632	1,545	4,552	
% of Total Value	52.2	10.6	32.1	1.6	0.4	1.9	4.4	1.0	13.9	33.9	100.0	
% of all Insts. held	100.0	20.3	61.5	3.0	0.7	3.7	8.4	2.0				

Source: Bank of Canada Statistical Supplement.

TABLE 6

EQUITY — COMMON AND PREFERRED STOCK AT BOOK VALUE

	INSTITUTIONAL HOLDINGS							
	Total Institutional Holdings	Life ^(a) Ins. Co's.	Other ^(a) Ins. Co's.	Mutual ^(a) Funds	Trust ^(a) Loan	Pension ^(a) Funds	Inv. ^(a) Holding Co's.	General Public Holdings
1962 (\$ million)	2,615	293	91	1,094	113	500	524	17,644
% of Total Value	6.9	0.8	0.2	3.1	0.3	1.3	1.4	46.3
% chg. over prior year	7.4	—	9.6	3.3	18.9	27.2	4.4	16.1
% of all Insts. held	100.0	11.2	3.5	41.8	4.3	19.1	20.0	
1961 (\$ million)	2,435	303	83	1,059	95	393	502	15,194
% of Total Value	7.0	0.9	0.2	3.0	0.3	1.1	1.4	43.6
% of chg. over year	23.5	2.7	10.7	28.8	15.9	27.2	29.0	—
% of all Insts. held	100.0	12.4	3.4	43.5	3.9	16.1	20.6	1.0
1960 (\$ million)	1,972	295	75	822	82	309	489	15,343
% of Total Value	5.9	0.9	0.2	2.5	0.2	0.9	1.2	45.9
% of chg. over year	3.9	—	5.6	2.5	24.2	21.7	20.7	0.1
% of all Insts. held	100.0	15.0	3.8	41.7	4.2	15.7	24.8	
1959 (\$ million)	1,898	300	71	802	66	254	405	15,321
% of Total Value	5.9	0.9	0.2	2.5	0.2	0.8	1.3	47.5
% of chg. over year	8.9	3.4	14.5	10.2	11.9	20.4	3.1	10.5
% of all Insts. held	100.0	15.8	3.7	2.3	3.5	13.4	21.3	
1958 (\$ million)	1,743	290	62	728	59	211	393	13,863
% of Total Value	5.9	1.0	0.2	2.5	0.2	0.7	1.3	47.3
% of chg. over year	23.6	34.9	—	22.4	11.3	37.9	19.1	8.7
% of all Insts. held	100.0	16.6	3.6	41.8	3.4	12.1	22.5	
1957 (\$ million)	1,410	215	64	595	53	153	330	12,748
% of Total Value	5.3	0.8	0.2	2.2	0.2	0.6	1.2	47.4
% of chg. over year	20.1	—	3.2	16.7	10.4	44.3	6.5	3.4
% of all Insts. held	100.0	15.2	4.5	42.2	3.8	10.9	23.4	
1956 (\$ million)	1,167	221	62	510*	48	106	310*	12,331
% of Total Value	4.7	0.9	0.2	2.0	0.2	0.4	1.2	49.4
% of chg. over year	2.0	7.3	24.0	13.3	11.6	11.6	3.3	7.3
% of all Insts. held	100.0	18.9	5.3	43.7	4.1	9.1	26.6	
1955 (\$ million)	1,144	206	50	450*	43	95*	300*	11,494
% of Total Value	5.0	0.9	0.2	2.0	0.2	0.4	1.3	50.3
% of all Insts. held	100.0	18.0	4.4	38.3	3.8	8.3	26.2	

SOURCES AND EXPLANATIONS: ^(a) Taxation Statistics — refers to only Corps' having over \$1 million assets or profits over \$50,000. ^(b) Cnd. Balance of Int'l Indebtedness. ^(c) Bank of Canada Statistical Supplement. ^(d) Supt. of Ins. for Can. Annual Reports Vol. 1. ^(e) Financial Post Survey of Ins. Co's. ^(f) DBS publication 74-201. * Assumed or Estimated.

their holdings at a much less than proportional rate. In terms of proportions, this change was equivalent to a decline from 20.3 per cent and 61.5 per cent of total institutional holdings in 1955, to one of 12.2 per cent and 53.4 per cent respectively in 1962. Only pension fund investors attained a noticeable increase in their ownership proportion of all institutional holdings; this was through an increase from 8.4 per cent in 1955 to a proportional high of 19.3 per cent in 1962.

On the other hand, the foreign investor and the general public annually increased their holdings of corporate bonds at a rate of 6.6 per cent and 4.2 respectively. This resulted in foreign holdings having increased from \$1.5 billion, or 33.9 per cent of outstanding corporate bonds in 1955 to \$3.0 billion, or 37.5 per cent in 1962. Public ownership meanwhile increased from 13.9 per cent (\$632 million) in 1955 to a 15.4 per cent participation (\$1,225 million) by 1962 (see Table 5).

CORPORATE STOCK EQUITY

The rate at which Canada increased its Gross National Product within the eight-year period from 1955 through 1962, was one of the slowest of all industrialized nations.

Corporate activity over this period, accordingly, followed a very similar pattern while nevertheless incurring a noteworthy increase in the value of securities outstanding. This was largely attributable to the period from 1955 to 1959, in which time their value increased from some \$22.8 billion in 1955 to \$32.2 billion in 1959. Characteristic of this period, and no doubt accountable to a noticeable degree for this increase, were the large amounts being expended on new construction and machinery and equipment programs by business, despite relatively low corporate profit levels.

The continued necessity to grow, and the corresponding obligation to keep up with expansion, regardless of profits, thus resulted in the corporation resorting to external sources. A degree and enhanced proportion of this amount accordingly was acquired through the institutional investor. In this respect, their investments have increased at an annual rate of a surprising 7.6 per cent or to a total book value of \$2.6 billion in 1962 as compared to a value of only \$1.1 billion for 1955. This value, nevertheless, represents only 6.9 per cent of all corporate equities outstanding in 1962. Of all institutional holdings, pension fund investments have accounted for the largest proportional increase, rising from 8.3 per cent in 1955 to 19.1 per cent by 1962. Equity investment holdings of life insurance companies, in contrast, declined from 18.0 per cent of institutional holdings in 1955 to 11.2 per cent in 1962.

The proportion of Canadian corporate equities in the hands of foreign investors has long been, and

no doubt shall continue to be, a subject for widely debated controversy and policy consideration. The subject of foreign ownership, however, is not examined in this article in terms of this controversy, but rather is viewed in the light of the service it renders to the overall spectrum of equity financing. While the data illustrated in Table 6 can by no means be considered as totally comparable, due to the different sources used, they can be said to be fairly representative of the trend in the distribution of Canadian equity holdings. Within this context, it is apparent that the increase in foreign holdings of Canadian equities has been at only a slightly greater rate than has been the corresponding expansion in the value of equity securities outstanding. The annual increase in foreign holdings has been at a rate of only 3.8 per cent with their book value having risen from \$10.2 billion in 1955 to \$17.8 billion by 1962. As a proportion of all equity securities outstanding their position consequently had risen to 46.8 per cent of this total for 1962 as compared to 44.7 per cent in 1955.

Despite an annual rate of increase of almost 4.5 per cent in the amount of equities in the hands of the public, their proportion has declined from 50.3 per cent in 1955 to 46.3 per cent by 1962. This concentration in public hands, however, is not as great as appears due to the fact that this total includes a large amount of securities which might otherwise have been considered as institutionally managed. This refers to the large and expanding amount of securities which are held in trust by the trust companies but for the purpose of asset-totalling cannot be considered as an actual trust deposit. Also included would be the substantial amount of equity investments held by other corporations and businesses.

SUMMARY OF INVESTMENT HOLDINGS BY MAJOR PARTICIPANTS

Essentially, three broad classes of investors hold Canadian bond and equity obligations. These comprise the institutional, the public and the foreign investors. In Tables 7A and 7B, changes in the holdings of these three sectors for each type of investment are shown in dollar terms and are also expressed on a percentage basis for the period 1955 through 1962.

As these tables illustrate, institutional investors have been the dominant force in Canadian bond markets as a result of their holdings of total outstanding issues. However, their dominance since 1955 with respect to each class of such debt financing has been declining in proportionate terms. Consequently, the market has seen institutional investors assume the role of supplying a substantial but less than proportional amount of new capital requirements. This gap has been filled by the public

(Breakdown via Dollar Value of Holdings in Millions)

	1955	1956	1957	1958	1959	1960	1961	1962
	\$	\$	\$	\$	\$	\$	\$	\$
Institutional	9,320	9,533	9,420	10,349	9,756	9,845	11,063	9,809
Public	6,033	5,118	5,207	5,435	6,657	7,094	6,753	8,685
Foreign	647	583	538	632	722	808	820	954
Government of Canada	16,000	15,234	15,165	16,416	17,135	17,747	18,636	19,448
Institutional	2,451	2,648	2,924	3,295	3,416	3,630	4,262	4,707
Public	733	875	1,049	1,186	1,334	1,556	2,164	2,300
Foreign	890	1,093	1,196	1,307	1,616	1,663	1,771	2,013
Provincial Bonds	4,074	4,616	5,169	5,788	6,366	6,849	8,197	9,020
Institutional	1,231	1,294	1,362	1,525	1,651	1,812	1,964	2,091
Public	522	583	690	758	807	904	1,060	1,123
Foreign	450	550	658	780	912	1,024	1,036	1,155
Municipal Bonds	2,203	2,427	2,710	3,063	3,370	3,740	4,060	4,369
Institutional	2,375	2,656	2,950	3,214	3,356	3,564	3,536	3,756
Public	632	906	1,121	1,310	1,258	1,359	1,079	1,225
Foreign	1,545	1,796	2,263	2,477	2,520	2,532	2,670	2,994
Corporate Bonds	4,552	5,359	6,334	7,001	7,134	7,455	7,285	7,975
Institutional	1,144	1,167	1,410	1,743	1,898	1,972	2,435	2,615
Public	11,494	12,331	12,748	13,863	15,321	15,343	15,194	17,644
Foreign	10,200	11,434	12,695	13,724	15,012	16,137	17,241	17,845
Corporate Equities	22,838	24,932	26,853	29,330	32,231	33,452	34,870	38,104
Institutional	16,521	17,298	18,066	20,126	19,963	20,823	23,260	22,978
Public	19,414	19,814	20,815	22,552	25,484	26,256	26,250	30,977
Foreign	13,732	15,456	17,350	18,920	20,782	22,164	23,538	24,961
Total Equity & Debt	49,667	52,568	56,231	61,598	66,238	69,243	73,048	78,916

(Breakdown via Percentage Composition of Holdings)

[illegible]

and foreign investors particularly with respect to provincial and corporate equity and debt obligations.

The role of the institutional investor in equity participation since 1955, though still very modest, has nevertheless become more prominent. Equity requirements, however, are still to a large extent met by the public and foreign investors. While foreign and public holdings are close to being in balance, it should nevertheless be borne in mind that foreign holdings in many instances are in large subsidiary companies whose operations and structure in many instances reflect the policies set by the parent company. The public's position, on the other hand, might conceivably tend to be largely committed to small localized corporate enterprises.

In view of existing legislation governing equity participation on the part of the institutional investors and their ability to commit their funds in as sizeable amounts as possible, without disrupting the market, it follows that most of such equity holdings are thus in those companies having a high degree of foreign ownership.

The ability of the institutional investor, therefore, to influence the degree of foreign predominance has to date been relatively limited. While they have no doubt capitalized and profited from their equity position, nevertheless, they have not yet served as an effective media to increase the overall proportion of Canadian equities in the hands of domestic interests.

REQUIREMENTS FOR PORTFOLIO INVESTMENTS — 1970

In its first annual review, the Economic Council of Canada has depicted a striking picture of the potential Canadian economy of 1970. It describes Canada as potentially expanding in population, productivity and social vitality at the highest rate in its history. This goal, which is within Canada's grasp, nevertheless requires a number of basic changes in both "private decisions and public policies toward the achievement and maintenance of high standards of performance in the economy". The potential output target for the economy by 1970 calls for an average compound advance, from 1962, of almost 7.4 per cent per year in the value of total production of goods and services to a Gross National Product projected level of \$62.5 billion in constant 1963 terms — or to about \$71.5 billion allowing for a 2% per annum increase in prices as was assumed by the Council in making its projections.

In projecting debt and equity requirements within the framework of this \$71.5 billion, we assumed that the trends of portfolio investment evident in 1955, 1959, and 1962, might well continue to be representative of 1970. (See Table 8.)

CANADA PENSION PLAN

The Canada Pension Plan, in permitting participating provinces access to, and discretion over, the investment of funds paid in by their residents, will at least be predestined to have a marked impact upon the market for provincial and provincially-guaranteed bond issues. This in turn, will have secondary effects on all sections of the bond markets. This emanates from the fact that each province will likely tend to purchase its own debt obligations in preference to those of the Federal Government.

The impact of the plan on the entire interest rate structure of the securities markets has been the subject of considerable controversy. The Report of the Royal Commission on Banking and Finance and the Annual Review of the Economic Council of Canada clearly illustrate this point.

The Department of Insurance (Ottawa) anticipates that by 1970 the fund (exclusive of Quebec) will total some \$2.5 billion, and by 1985 will have risen to a level of \$7.5 billion. Relating this \$2.5 billion level of investable funds to our projected total requirement of provincial debt financing of about \$17,875 million for that year, it would indicate that the pension fund could possibly provide some 14 per cent of all provincial bond financing. This proportion of holding, no doubt, would have an impact upon their distribution. Initially, with such a flow of new funds into these bonds, and especially considering that they are only expected to increase in dollar volumes outstanding by some \$8,855 million, there would be very likely an induced tendency towards lower yields. The downward readjustment in yields of provincial and provincially-guaranteed bonds, however, would be temporary in that the higher yields available on other bonds would tend to attract each class of investor to redirect its funds into these other securities until yields are once again realigned with their prior quality-yield relationship. This presupposes that the withdrawal of funds from the public will be offset by an increased rate of national savings in the private sector (see Table 8). We feel this contention is supported by the possibility of some degree of further tax relief in the near future.

CONCLUSION

Based on the foregoing text, we can now attempt to answer those questions posed at the commencement of this article. Initially, it appears that Canada's financial institutions have grown at a considerably slower rate than the corresponding expansion in the requirements for new borrowing by virtually all levels of Government and domestic corporations, be it either through debt or equity financings. Accordingly, while institutional investments have tended to be large and particularly dominant in the holding of bonds, their proportion

TABLE 8

LEVELS OF INCOME, SAVINGS AND PORTFOLIO INVESTED CAPITAL (GOVERNMENT OF CANADA, PROVINCIAL, MUNICIPAL, AND CORPORATE DEBT AND EQUITY) ALONG WITH CAPITAL SOURCES REQUIRED TO SUSTAIN VOLUME OF GROSS NATIONAL PRODUCT FOR SELECTED YEARS 1955, 1959, 1962 AND 1970 (projected)

(\$ in current dollars)

	1955			1959			1962			1970 (projected)					
	\$	% of GNP	\$	% of GNP	% change		% of GNP	\$	% change		% of GNP	\$	% change		
					1959 over 1955				1962 over 1955	1962 over 1959			1970 over 1955	1970 over 1959	1970 over 1962
Gross National Product	27,132	100	34,784	100	28		100	40,401	49	16	100	71,500	164	106	77
National Income	20,737	76	26,417	76	27		76	36,606	48	39	76	54,340	162	106	48
National Savings	4,951	18	5,834	17	18		17	6,891	31	18	20	14,300	189	145	108
Personal	850	3	1,357	4	60		6	2,358	177	74	7	5,005	489	269	112
Business	4,103	15	5,063	15	23		14	5,572	33	10	13	9,295	127	84	67
Total Equity & Debt	49,667	183	66,238	190	33		195	78,916	59	19	200	143,000	188	116	81
Debt:															
Govt. of Canada	16,000	59	17,135	49	7		48	19,448	22	13	43	30,745	92	79	58
Provincial	4,074	15	6,366	18	56		22	9,020	121	42	25	17,875	339	181	98
Municipal	2,203	8	3,370	10	53		11	4,369	98	30	13	9,295	322	176	113
Corporate	4,552	17	7,134	21	57		20	7,975	75	12	22	15,730	246	120	97
Equity: Corporate	22,838	84	32,231	92	41		94	38,104	67	18	97	69,355	204	115	82
Invested Portfolio Holdings Distribution															
Institutional	16,231	60	19,963	57	23		57	22,978	42	15	54	38,610	138	93	68
General Public	19,704	73	25,484	73	29		77	30,977	57	22	78	55,770	183	119	80
Foreign	13,732	51	20,782	60	51		62	24,961	82	20	68	48,620	254	134	95

of the respective totals have been on the decline. This trend should lead to greater participation by the public and the foreign investor with respect to bond financings.

The institutional investment position in equities, though modest in relation to the market's total value, has been on the increase. Over the period 1955 to 1962, the annual rate of increase in institutional holdings of equities has been considerably larger than the rate of that of their total assets. Their investments in equities, however, has tended to be dictated by the limitations imposed upon them by legislation and thus essentially have been of a high quality nature. This factor, as noted above, does serve to specifically direct a fairly large portion of their equity investments into those corporations having a substantial degree of foreign ownership so as to prospectively affect foreign dominance. Recent changes in legislation regarding the extent of equity financings held by institutions should at least foster further equity participation.

The changing patterns of holdings of the institutional investor (Tables 2 through 7) reveals that they are fairly active and sensitive traders. Investment policy appears largely to be predicated upon current market conditions as opposed to the widely held viewpoint that policy is largely one of "buy and hold".

Canada's financial requirements for new capital expressed in a debt and equity form in 1970 (see Table 8), will be substantial and, as estimated, will have to, in total, increase some 81 per cent from its level of 1962, or at an annual compounded rate of 7.70 per cent. In light of a prospective period of rapid growth contrasting this period of slow economic expansion, an application of domestic owner-

ship trend based on former years might well prove to be conservative.

If the rate of national savings, particularly in the personal sector, increases at a compounded rate of 8.20 per cent and 9.86 per cent per year respectively, a substantial and noticeably larger proportion of this increased total of debt and equity requirements should be forthcoming from the general public. In addition, the total assets of our financial institutions no doubt will continue to expand and grow at a representative pace. Based on past experience, this should be at least at a rate comparable to the increase in Gross National Savings.

The impact upon the securities markets of the Canada Pension Plan in light of its projected \$2.5 billion value in 1970, will likely be most apparent with respect to provincial and provincially-guaranteed bond issues. Such a large amount of money coming into the market for these bonds will tend to exercise a downward pressure on their yields. Offsetting this tendency however, will be the fact that a portion of funds that otherwise would have been invested in this sector will be channelled into other classes of debt financings. This would tend to enhance the demand for these other bonds and similarly cause yields to decline.

The foreign investor will undoubtedly continue to be an integral and vital part of an investment structure. Funds must still flow from this sector if the economic expansion envisaged and considered essential by 1970 is to be achieved. Restrictive measures on the flow of such funds cannot but disrupt this desirable supply of capital. Redirection may be more in order than restriction but what undoubtedly emerges is that the institutional investor cannot meet these needs alone.

(* Figures for Canada)

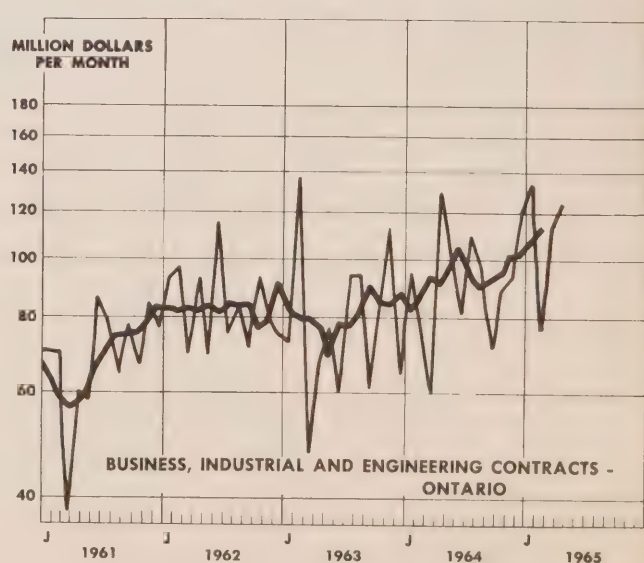
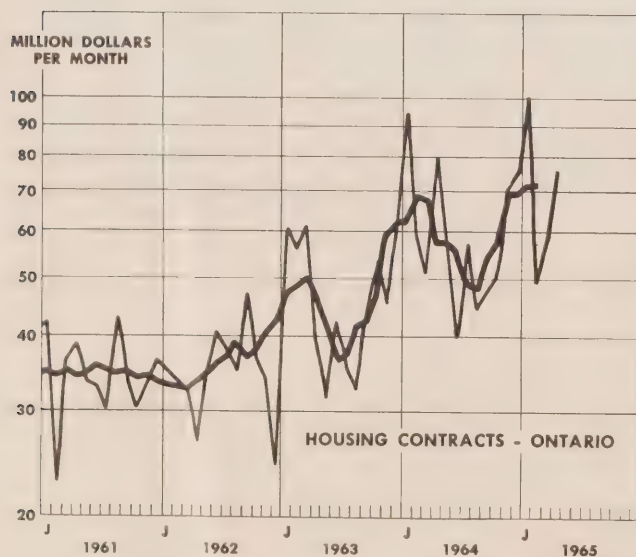
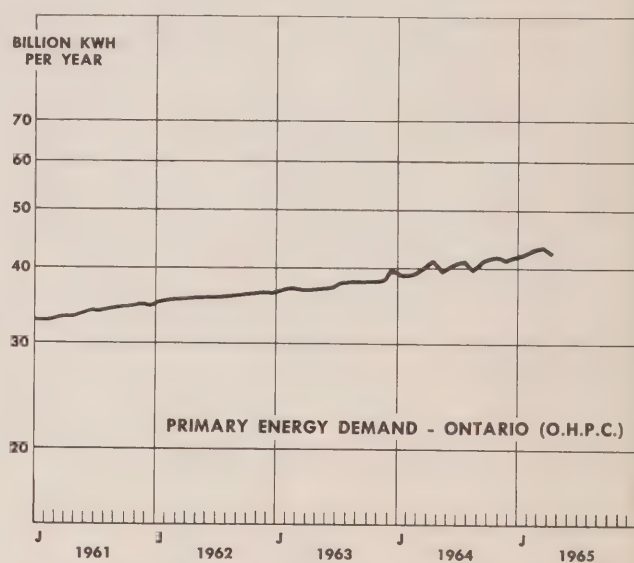
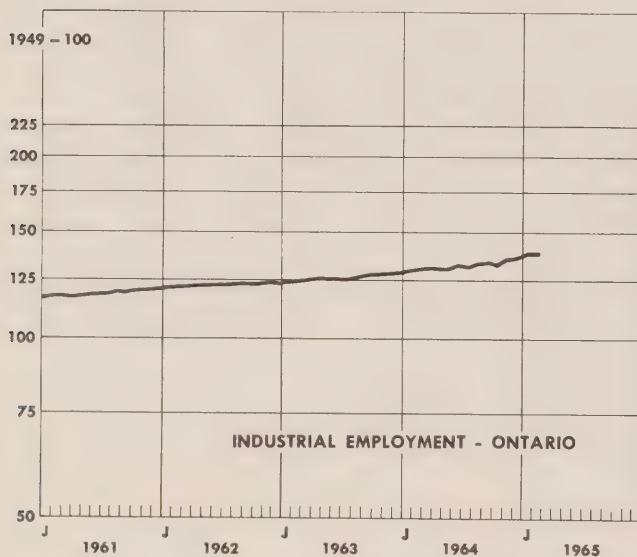
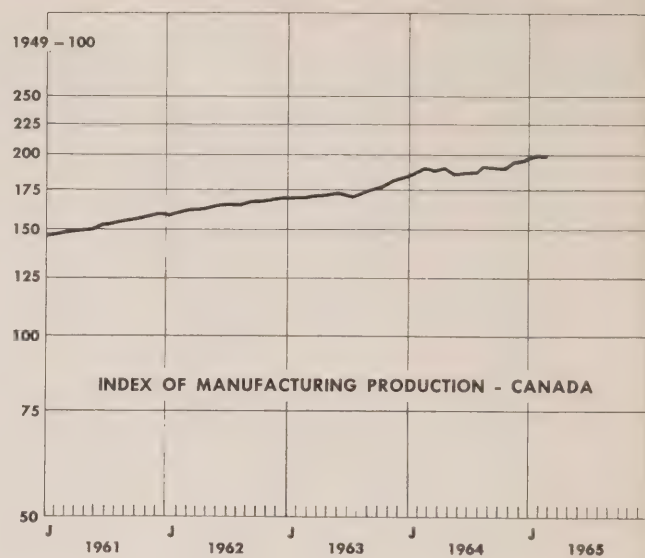
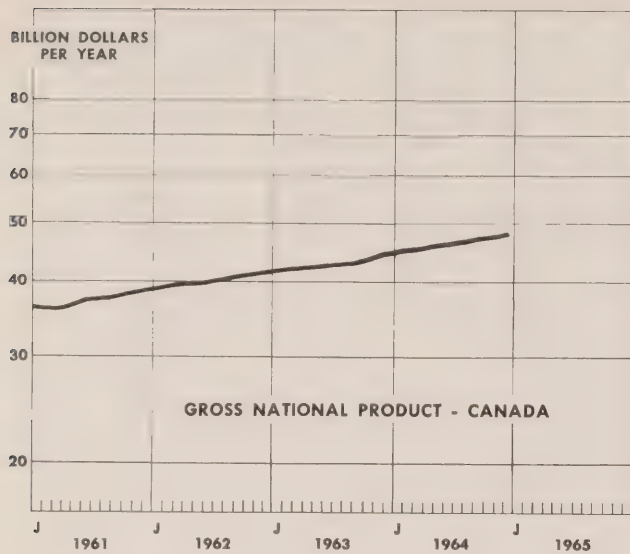
1964 ----- 1965 -----

COINCIDENTAL AND LAGGING INDICATORS

ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED

(1) For a few months, the labour reports will not be adjusted for seasonal variation as recent revisions in the statistics have not been completed in the seasonally adjusted series.

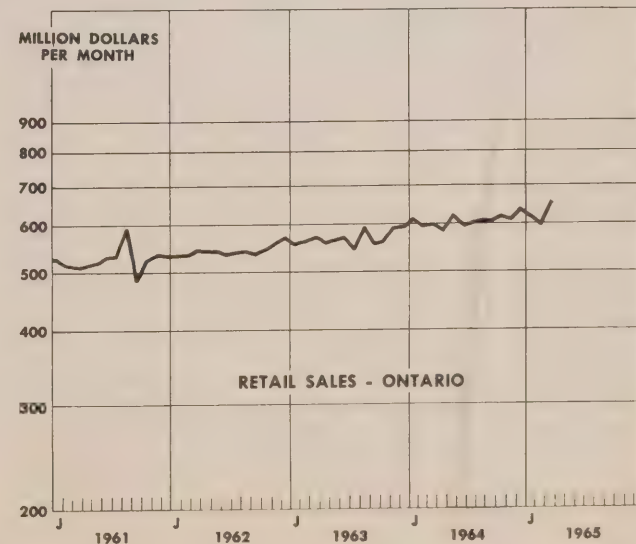
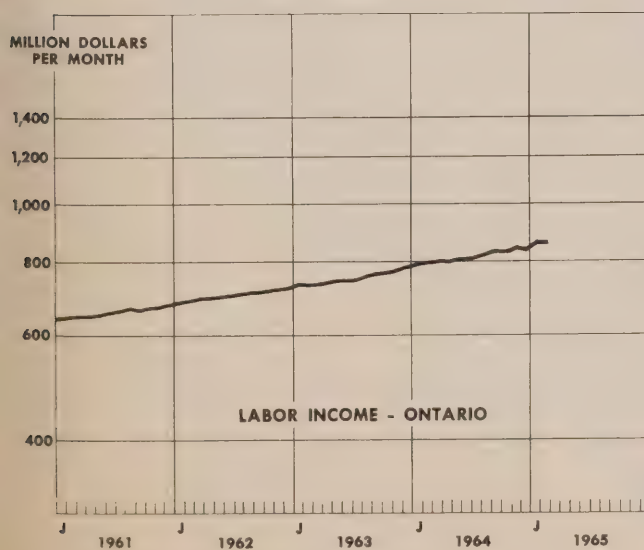
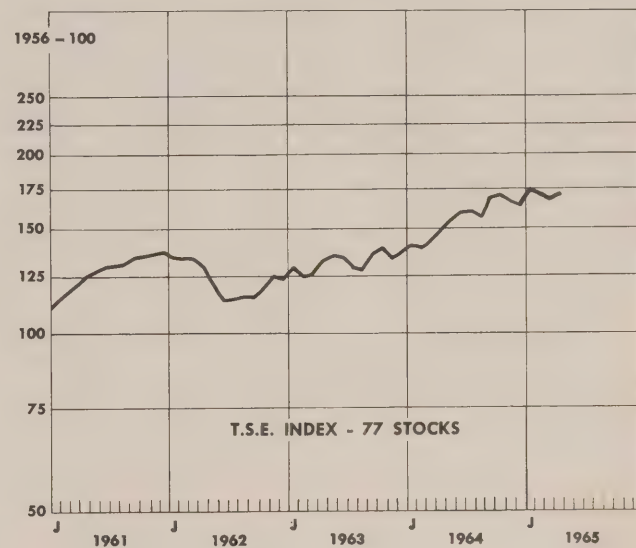
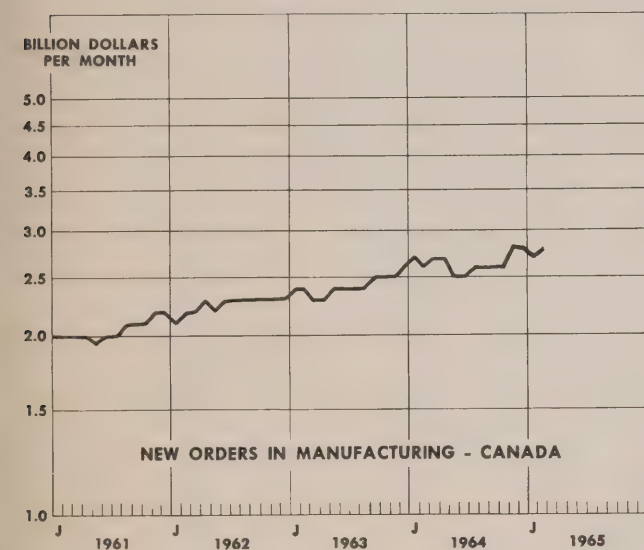
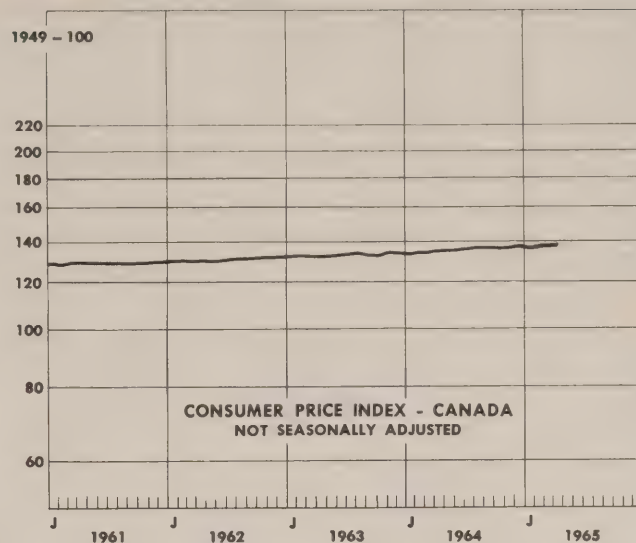
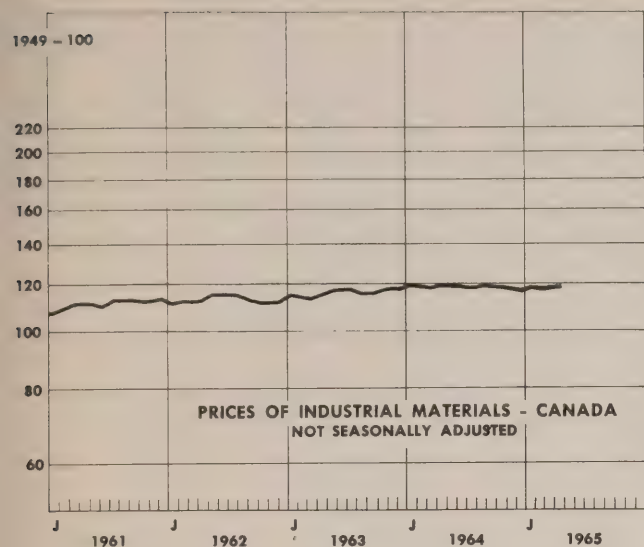
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



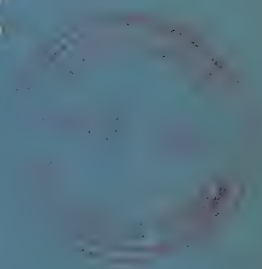
— TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

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THE ONTARIO ECONOMY

Gross National Product

Recently published DBS figures indicate that the Canadian Gross National Product was valued at \$49,676 million for the first quarter of 1965 seasonally adjusted. This was an increase of 3.5% from the previous quarter. Among the components of the Net National Income at factor cost, wages, salaries and supplementary income rose by 3.5%, and military pay and allowances showed a less than 1% rise. Corporation profits (before taxes) increased 1.2%, reflecting high profits in printing, the metal industries (including transportation equipment) and services, partially offset by lower profits in mining, quarrying and oil wells, wood, chemicals, and transportation, storage and communication. Net income of non-farm unincorporated business rose 1.5% as a result of mixed profit trends.

Among the components of the Gross National Expenditure, business gross fixed capital formation showed the highest quarterly increase. At a seasonally adjusted annual rate of \$10,028 million, it is nearly 7% above that of the fourth quarter of 1964. New residential construction, non-residential construction and new machinery and equipment increased 3.6%, 9.5% and 6.3% respectively.

Exports of goods and services rose only 1.0% to an annual rate of \$10,512 million whereas imports rose 4.5%. Consequently, the foreign trade deficit increased to an annual rate of \$1,060 million.

Personal expenditure on consumer goods and services rose 1.2% to an annual rate of \$30,588 million. In the goods sector, the rise was mostly attributable to sales of durables, particularly new cars. Spending on services rose more than 2% with increases for personal service, personal care and medical care leading in this category.

Motor Vehicle Production and Sales — 1965

Currently, motor vehicle production in Canada is at an all time high. The most recent production returns indicate that by June 26, some 391 thousand cars and 77 thousand trucks were produced. Over the comparable period last year, this is a total gain of over 10%. If the present trends continue, total 1965 production is likely to exceed 600 thousand cars and 120 thousand trucks.

The following table lists motor vehicle production in Canada in the January to May period for the major companies. The figures were supplied by the Motor Vehicle Manufacturers Association.

CAR AND TRUCK PRODUCTION

	5 Months 1965	5 Months 1964	% Change
American Motors	16,748	15,905	5.3
Chrysler	49,671	50,233	-1.1
Ford	94,679	95,256	-0.6
General Motors	212,758	178,619	19.1
Internat'l Harvester			
Trucks	6,150	6,146	0.1
Studebaker	9,494	6,203	53.1
Volvo	1,373	1,001	37.2
Total All Cars	327,287	298,909	9.5
Total All Trucks	63,586	54,454	16.8
Total All Vehicles	390,873	353,363	10.6

Despite a strike lasting from January 26 to March 7, production at the Chrysler plants showed a decline of only 1% from a comparable period last year. This was achieved by going on two shifts on April 12. Though many of the new employees were relatively unskilled in car assembly, the company was producing more than 40 per hour on each shift within a month. The June figures for Chrysler pro-assembly of 14,769 cars and 2,031 trucks, the company showed an increase of over 48% from June, 1964. As a result, Chrysler production of cars and trucks for the first six months of this year shows an increase over last year of nearly 8%.

The fractional decline in the production of Ford vehicles during the first 5 months was due to a ten-day strike in January. At present, assembling facilities are operating at full capacity. With the completion of a \$25 million truck plant, Ford intends to spend an additional \$13 million converting existing truck assembly plant and equipment to that required for cars.

Sales of motor vehicles in Canada showed mixed trends in the first four months. Car sales numbered over 232 thousand of which 42% were sold in Ontario. For the province, this is a gain of 8% from the comparable period last year.

On the other hand, the sale of commercial vehicles showed a fractional decline on the national level. Other provinces still show increases whereas the large increases in Ontario sales took place last year. In the January to April period this year, some

12,500 trucks were sold in Ontario, resulting in a decline of 9% compared to 1964.

As might be expected, Canadians are paying more this year for passenger cars. In April, the average retail values of cars sold in Ontario and in Canada were \$3,220 and \$3,203 respectively. Both these figures were increases of 2.1% from April 1964. The retail sales value of commercial vehicles declined 2% in Ontario, reflecting more than proportional decreases in the sales of large vehicles.

The financing of new passenger car sales appears to be similar to last year. Sales finance companies backed approximately 25% of the new car sales in Ontario. The amount of financing per car, however, has increased slightly. Supplying an average of \$2,687 in March 1964, finance companies have increased credit to an average of over \$2,790 this March.

A substantial amount of new car financing is provided by chartered banks. The balance of personal loans not secured with bonds or stocks stood at \$1,848 million in March, 1965. Though this is an increase of over 23% from a year ago, it is impossible to determine how much is attributable to car financing.

On the other hand, the financing of truck sales in Ontario has changed somewhat during the last twelve months. In March, 1964, approximately 15% of the new commercial vehicles sold were financed through sales finance companies, whereas a year later this proportion increased to 17%. The dollar value of these loans increased substantially — from \$2.2 million to \$3.3 million, an increase of 50%.

Construction

Seasonally adjusted, Ontario housing contracts were valued at \$50.2 million in May. This was a \$26.0 million decline from the high level of the previous month. Business, industrial and engineering contracts in May were valued at \$119.5 million, a slight drop from the April level.

Residential construction in May was particularly active with starts made on some 6,400 dwelling units in Ontario. In the first five months, starts numbered 16,596, an increase of 10% over the comparable period in 1964. Showing an even greater increase was the number of dwelling units under construction, up 22% this May compared to last year. In Metro Toronto alone, a record 25,600 dwelling units were under construction.

In Ontario, recently announced large contracts of \$1 million and over totalled \$80.7 million in May.

Some of the significant awards are listed below.

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ Million</i>	<i>Description</i>
Ajax	3.6	Apartments
Cornwall	14.5	Plant and offices
Hamilton	3.5	School
Kitchener	1.3	Motel
London	2.5	University building
Oshawa	1.0	Auto plant addition
Ottawa	9.1	Apartments
Penetanguishene	1.2	Hospital expansion
Sudbury	1.4	High school
Toronto	15.7	Apartments
Windsor	3.4	Hotel
York Twp.	5.5	Film plant
Various locations	5.2	Provincial highways

Employment and Income

In May, the Ontario Labour force numbered 2,595 thousand of which 786 thousand were women. This increase of 54 thousand from May, 1964, can be attributed to growth in the population of persons aged 14 and over since the participation rate (labour force as a proportion of this population) was 57% in both cases.

In a twelve-month period, the number employed increased substantially. Although there has been an expected small decline in the agricultural sector, total employment increased by 65 thousand. Consequently, unemployment has been reduced from 70 thousand in May, 1964 to 59 thousand this May. This is a 2.3% unemployment rate comparing favourably with a 4.5% rate for the other provinces.

On a seasonally adjusted basis, labour income in Ontario totalled \$877 million in March, 1965. This was a considerable increase (2.2%) from February due mostly to increased earnings per person — i.e. the labour force rose less than 1% in that period.

Finance

Canadian monetary conditions tightened slightly during May as new borrowings continued to be at a high and slightly increased volume. An indication of the increased pressures on the market was that of the day-to-day loan rate which opened the month at a level of 3¾% and closed at 4%.

Fractional price losses were recorded by most outstanding issues traded on Canadian bond markets during May. On relatively low volume of trading, all sectors shared in this decline. On average, short and medium-term issues registered losses up to 25 cents while long-term issues had overall

declines ranging upwards to a full point on a \$100.00 bond. Prospects of higher borrowing costs in the near future, a forecasted slow-down in the rate of business expansions, and a continued high rate of new Canadian bond financings have contributed to this downward adjustment in prices and increase in yields. During the first five months of 1965, new Canadian bond financings, at \$1.80 billion, were 20.1% higher than last year's comparable total of \$1.50 billion.

The trend towards higher equity prices in most industrial sectors of the Canadian stock markets was brought to an abrupt halt at about mid-month. After the attainment of new all-time closing highs at that time, extensive selling pressures were then encountered and subsequently prevailed for the duration of the month. The Toronto Stock Exchange Industrial Index, after opening the month at a level of 174.82, rose to a high of 178.05 on May 14th but

declined relatively steadily thereafter to close the month at a level of 174.63, down 3.42 points from the month's high and 0.19 points on Index over the month. The market's selloff was apparently triggered by a statement made by U.S. Federal Reserve Board Chairman, William McChesney Martin, wherein he cited what he termed disquieting similarities between conditions in the U.S. economy now and just before the 1929 crash as well as concern over the hostilities in Vietnam.

Canada's foreign exchange reserves (official holdings of gold and U.S. dollars) declined by U.S. \$67.8 million during May to close the month at a level of U.S. \$2,498.7 million.

During May, the Canadian dollar fluctuated in a narrow range between 92.59 cents and 92.70 cents in terms of U.S. funds and closed the month at 92.63 cents, unchanged from the previous month's closing level.

THE GROWTH AND DEVELOPMENT OF THE MOTOR VEHICLE INDUSTRY IN ONTARIO

C. PETER HONEY

Economist, Economics Branch

ONTARIO DEPARTMENT OF ECONOMICS AND
DEVELOPMENT

A revolution may be defined as a sequence of related events or occurrences following one another in such a manner as to result in profound qualitative and quantitative changes. The Canadian Automotive Revolution began 60 years ago in Ontario and we are today still living in the transformation period. The automobile has influenced our modes of transportation, our cities, our social relationships, and indirectly our government.

The Canadian Automotive Industry⁽¹⁾ suggests that there are seven factors of prime importance determining the demand for motor vehicles: personal disposable income, population growth, credit, scrappage, prices and taxes, operating costs, roads and highways. These demand components are almost a catalogue of the economic factors influencing motor vehicle production.

Canadian population doubled in the first 30 years of this century and grew 75 per cent between 1931 and 1961. Seventy per cent of Canadians now live in urban areas. In 1926 there were only 50,000 miles

of surfaced highways and rural roads in Canada. By 1962 there were over 478,000 miles of roads and streets — one-fifth of them located in Ontario.

Since the end of the Second World War there has been a significant growth in Canadian personal income⁽²⁾. Combined with population growth this means that more Canadians, both absolutely and relatively, are able to afford consumer durables. Canadians spend about 90 per cent of their personal income. Of this 90 per cent, it is estimated that 11 per cent goes to consumer durables which are very strongly influenced by automotive purchases.

In 1964 total Canadian production of motor vehicles amounted to over 668,000 units and brought to just under 12 million the number of cars and commercial vehicles produced in Canada since 1904.

⁽¹⁾ Ottawa, 1956, p.20 (Study for Royal Commission on Canada's Economic Prospects).

⁽²⁾ *Per caput* personal income:

	Ontario	Canada
	\$	\$
1945	914	755
1963	2,039	1,736

There are now over 6.4 million vehicles registered in Canada — an increase of one-fifth in the past decade alone. It is estimated that on average there is one passenger car per household in Canada (10 per cent have two) and that one Canadian in three is a vehicle owner. Canadians in 1963 burned 3.7 billion gallons of motor fuel and provided provincial treasuries with \$717 million from fuel taxes and motor vehicle registrations.

Over 95 per cent of Canadian automotive production is concentrated in Ontario.⁽³⁾ The motor vehicle industry of Ontario has probably done more to affect the daily lives of millions of Canadians than any other single influence emanating from the province — be it economic, political or social.

In 1961 Ontario motor vehicle manufacturers employed over 20,000 people and shipped goods worth nearly \$850 million to rank first among Ontario manufacturing industries. Motor vehicle parts and accessory manufacturers, also employing over 20,000, ranked seventh in shipments while rubber tire and tube manufacturers ranked sixteenth. Taken together these three industries shipped 11.4 per cent of Ontario's total manufacturing output and employed 8.1 per cent of the manufacturing labour force.

There are several reasons why the Canadian motor vehicle industry is so heavily concentrated in Ontario. The techniques of automotive production established early in the history of the industry meant that large amounts of capital had to be invested in the fixed plant and equipment necessary for mass production. Thereafter, the industry tended to become immobile as a function of both the high cost of re-investing and the essential linkages developed with local suppliers of skilled labour and component parts. Regionally, motor vehicle production has remained almost exclusively an Ontario phenomenon. Prior to World War II, the industry did attempt to decentralize from its Southern Ontario operations, but plants across the nation soon proved uneconomic and were closed. In short, the industry once it became a mature complex found that success tended to root it ever deeper in Ontario's industrial structure.⁽⁴⁾

Another explanation of concentration lies in the sensitivity of the automobile as a consumer durable to swings in demand. Only large companies with extensive financial resources can ride out depressed periods and still be financially able to modernize plant and operations in the light of changing conditions. The history of the automotive industry in Ontario reveals a continually shrinking margin for the marginal firm. In 1930, 70 per cent and in 1960,

98 per cent of automotive output was controlled by the "Big Three" (Ford, General Motors and Chrysler).

Both in terms of the number of firms and the geographic concentration of the industry, the key issue is volume. Efficient motor vehicle production necessitates large, complex and specialized production and assembly machinery. As a result, unit costs tend to fall only over large production runs. This fact has provided the drive to concentrate production in relatively large plants where economies of scale are attainable.

Not only is Ontario the producing centre of the Canadian industry, it also represents a very considerable segment of the market. One-third of Canada's motor vehicle registrations are in Ontario and the province provides a regular market for over 40 per cent of new vehicle production. This high degree of motor vehicle ownership is in part a reflection of the fact that Ontario's population and personal disposable income are the highest in Canada and in part a reflection of lower vehicle prices owing to geographical and transportation factors.

How and why did Ontario's motor vehicle industry reach its present stature?

As early as the last quarter of the 19th century Ontario possessed a flourishing carriage industry. The Dominion Census of 1871 records that Ontario's carriage industry was the province's sixth largest employer providing work for nearly 4,800 people. In the same year the industry turned out goods worth over \$3 million to rank twelfth among Ontario manufacturing industries. Even at this early date location played an important role. Markets were not unnaturally restricted to the more populous urban and rural areas of Southern Ontario where roads were at least present, if only in name. The carriage industry was also restricted to the south of the province by the boundary of the Canadian shield. Ontario's hardwood stands, the prime source of raw

⁽³⁾ The production of Volvo cars in Nova Scotia is as yet insufficient to affect the above. The recent decision by General Motors to decentralize its operations by opening a large vehicle plant in Ste. Therese will, in the long run, materially alter the traditional concentration of the industry in Ontario.

⁽⁴⁾ "Important factors militating against geographic decentralization at the present time are limited volume, the seasonal pattern of automobile demand and the concentration of parts suppliers in the general vicinity of the existing plants. It is questionable whether decentralization . . . was ever well advised and it seems certain that the industry's pre-occupation with costs will combine with the factors mentioned above to prevent any similar move in the foreseeable future." *The Canadian Automotive Industry*, pp. 49-50. The above was written in 1956. See note ⁽³⁾ *supra*.

material for the industry during the 19th century, were found in South-Central Ontario.

During the period 1870-1910, when the concept of a combustion-powered carriage was being transformed, in Europe and the United States, from a mere vision to an actuality, important transformations of a different nature were occurring in Ontario which would set the stage for the introduction of an automotive industry at the turn of the century.

One of these transformations had to do with another branch of the transportation industry — the railways. By 1915 Ontario's railway construction had led to a pattern within which Toronto had emerged as the hub of a radial network superimposed on an older system of inland lines from the lake ports. Railway over-expansion coupled with the economic decline of many smaller inland centres led to rail line abandonment and further inland stagnation. Thus by the First World War, Ontario's railway network mirrored the enhanced position of the larger urban centres as market and industrial foci.

Another transformation had to do with the rapid pace of industrialization in Canada and Ontario in the late 19th century. Rostow⁽⁵⁾ identifies the period 1896-1914 as a discrete "take-off" into industrialism in Canada. Recent work, while confirming that the period "was decisive for successful Canadian growth into an industrial economy,"⁽⁶⁾ also suggests that the last three decades of the 19th century can no longer be regarded as a period of secular depression. In fact:

"the growth of the manufacturing sector and its structure indicate that the last three decades of the nineteenth century were periods of substantial growth, increasing specialization in industry geographical location, and increasing specialization in the production of firms."⁽⁷⁾

The factory system made deep inroads upon Ontario's traditional small shop — especially in the cities — and average manufacturing establishment size grew significantly. These changes in manufacturing, combined with urbanization and changes in transportation, tended to reduce the growth opportunities of smaller centres. Larger centres, possessing pools of skilled and unskilled labour and the economic linkages necessary for the assembly of raw materials and the production of intermediate and final goods, were thus well suited to exploit the manufacturing and distribution potentialities of wider and wider economic hinterlands. These earlier developments meant that when the factory system and mass production spread to the automotive industry, as they did after 1910, the small car-

riage works-cum-auto producer in the small centre would lose out.

Not all Ontario towns fell prey to the larger centres such as Toronto, Hamilton and Windsor. While Canada's first auto plant was established in Windsor in 1904 by a group of Canadian businessmen who obtained the rights to produce and distribute Fords in the British Empire outside the United Kingdom, Oshawa moved quickly to help one of its older industries weather a difficult transition period. The McLaughlin carriage factory in Oshawa burned down in 1899 and the town offered a grant of \$50,000 to the company to rebuild. This timely action undoubtedly aided the McLaughlin carriage works to redirect its later production to motor vehicles. In 1907 the company began producing automobiles using imported Buick engines and McLaughlin-built chassis. By 1915 McLaughlin had affiliated with Chevrolet and three years later the associated Oshawa operations became General Motors of Canada.

The auto industry of Southwestern Ontario grew apace. Ford in its first year produced 117 vehicles and in 1908 introduced the first Model "T" which scored an immediate success. Everett-Metzger-Flanders established at Walkerville in 1909 and became Studebaker in 1911. International Harvester, an agricultural implement producer, took over the Chatham Wagon Works in 1911 but did not produce its first truck until 1920. Ironically, the first automobile ever built in Canada was an electric carriage produced in Toronto in 1893 but Toronto never became a major auto producer.⁽⁸⁾

The structure of the Ontario motor vehicle industry became evident at a very early date as an extension of the American industry largely confined to the assembly of imported components with locally-produced bodies. The importance of Ontario's large carriage and wagon industry lay initially in its ability to adapt to auto body production. This was both good and bad. It meant that numerous attempts were made over the breadth of the pro-

⁽⁵⁾ Rostow, W. W., *The Stages of Economic Growth*, Cambridge, 1960.

⁽⁶⁾ Bertram, G. W., "Economic Growth in Canadian Industry, 1870-1915: The Staple Model and The Take-Off Hypothesis," *CJEPS*, 29/2, p.161. It was during this period that Ontario's iron and steel, motor-vehicle and hydro-electric power industries became firmly established.

⁽⁷⁾ Bertram, *op. cit.*, p.161.

⁽⁸⁾ At one time or another several motor vehicle manufacturers have appeared and disappeared from the Toronto scene. Metro Toronto today, however, has the highest concentration of motor vehicle parts manufacturers in the province.

vince to produce motor vehicles.⁽⁶⁾ It soon became apparent, however, that motor vehicle production would become concentrated among the relatively few producers who had ready access to American research, design, and engineering facilities. Moreover, American industry as a function of both size and resources could turn out, even at an early date, a large volume of complex but relatively low-cost automotive components such as engines, transmissions, stampings and the like. Ontario's natural production advantage lay in the outer shell while the United States supplied the working parts. As the automobile revolution quickened in Canada — in 1917, 93,810 units were produced — Ontario firms became better able to supply component parts. However, these were often of the relatively simple bumper and spring variety.

As early as 1912 all-steel bodies were introduced, but owing partly to novelty, and partly to cost, most bodies remained wood framed. Indeed, it was not until the mid 1930's that all-steel bodies came into general use in Canada. This is partly explained by the fact that during the 1920's, when the move to all-steel bodies was becoming general in the United States, no Canadian iron and steel producer turned out suitable sheet steel for body stampings.

In 1914 the assembly line technique of mass production was introduced in Canada. This permitted the rapid assembly of standard components and, when combined with efficient materials handling, meant that the Canadian industry was committed within a decade of its inception to the volume production of low-priced, mass-market cars.

Accustomed as we are to today's constantly changing body styles and high-powered engines, we may forget that many of the recent automotive advances (disc brakes, tubeless tires, alternators, cheap automatic transmissions) have not represented substantive change. Most of the major automotive innovations that literally put the "car on the road" occurred fairly early in automotive history — self-starter (1911), balloon tire (1922), four-wheel brakes on "popular" makes (1924), safety glass (1926), synchromesh transmission (1928), V-8 engine (1932), and an automatic-type transmission just prior to World War II. Since then most automotive developments have merely been variations on a known theme.

The motor vehicle industry in Canada, similar to other secondary industries, has long enjoyed a moderate degree of tariff protection. However, the 35 per cent tariff which motor vehicles originally inherited from the carriage industry was hardly in keeping with the fact that Canada had neither the

established manufacturing base nor the domestic market potential to support an independent industry. In the more mature economies of the United States and France, for example, the going duty rate was 45 per cent. Even Great Britain in 1915 turned to a 33½ per cent rate to protect her home industry. The net effect of the Canadian automobile tariff was to encourage the establishment of Canadian subsidiaries of American companies wishing to tap Commonwealth markets — of which the Canadian was the most important.

The combined impact of the First World War, the British preferential tariff, and the rapid acceptance in Canada of the motor vehicle for both business and pleasure served to bring about spectacular growth. As early as 1909 exports of domestic vehicles may have exceeded imports. In 1917 the industry produced 93,810 units compared with a total of approximately 135,000 for all previous years. Total motor vehicle production by the mid-1920's had risen to well over 200,000 units and exports were assuming a substantial importance to the industry. Major export markets were found within the British preference tariff area. In 1923 over 84 per cent of exports went to five major Empire markets and exports claimed 33 per cent of total production.

During the 1920's increasing political pressure for the free import of cars brought about the tariff changes of 1926 which reduced the duty from 35 per cent to 20 per cent on cars valued under \$1,200 and to 27½ per cent for cars valued over \$1,200. The impact of such sweeping reductions was not lost on vehicle manufacturers and immediate pressure was brought by the industry to "improve" the tariff. Since production and assembly in Canada were now materially less attractive, a complex and clumsy system of duty drawbacks was instituted to ensure a 50 per cent "Empire Content". Buoyant demand, at home and abroad, continued to stimulate the industry until the depression. 1929 was a peak production year — 262,000 units — and a peak export year — 101,000 units.

With the great depression came stagnation. Exports declined both absolutely and relatively as foreign markets were lost through rising levels of protection and fluctuating exchange rates. Domestic demand fell precipitously and by 1932 total production had fallen to about 60,000 units or 24 per cent

⁽⁶⁾ Among them the following: the Graham at Ottawa, the Atlas at Brockville, the Galt at Galt, the Durant at Leaside, the National and Schact at Hamilton, the Reo at St. Catharines, the Amherst 4 at Amherstburg, the Superior at Petrolia and the Gray-Dort at Chatham.

of the 1929 level and approximately 15 per cent of industry capacity. This production loss of 76 per cent in the early years of the depression resulted in an employment drop of 54 per cent. Both declines exemplify the extreme sensitivity of durables-producing industries to falling levels of demand. In contrast, the employment index for all manufacturing industries in Canada declined 31 per cent while the value of manufactures declined 50 per cent. By the same token, the demand deferral, which brought about the decline over the period 1930-1933, was one of the enabling factors bringing rapid recovery in auto production after 1933. Between 1933 and 1937 production values increased by some 220 per cent. Other enabling factors were tariff revisions in 1931 and a production agreement with Ford of Canada in 1933 to produce all Empire V-8 car requirements here.

Further tariff changes in 1936 introduced a general duty of 17½ per cent which could rise to 22½ per cent if imports became a major threat to domestic production. The heart of the revision was a sliding-scale Empire Content scheme aimed at permitting manufacturers the free import of parts not made in Canada in return for reaching agreed production levels. The tariff revisions were important in that they explicitly recognized that volume production was essential in the Canadian industry. Ironically, as a result of both the tariff changes and the fact that the depression forced some firms out of business, imports rose steadily between 1937 and 1942.⁽¹⁰⁾

The demand for mechanized transport and armour brought about by the Second World War was large, continuing and crucial. Canada virtually kept the Commonwealth armed forces mobile on some form of wheeled or track vehicles. In the peak year of 1942, 216,000 vehicles of over 100 different types were produced. Vehicle production *per se* declined after 1942 but spares and other types of equipment kept production at record levels. Between 1939 and 1945 approximately 816,000 mechanized transport vehicles and over 50,000 armoured fighting vehicles were produced.

Peacetime reconversion in the industry was spurred by a pent-up and liquid demand for all types of pleasure and commercial vehicles and output was limited only by the availability of men and materials. Not unexpectedly, imports temporarily rose sharply in the immediate post-war period but by 1948 the 1929 production peak was surpassed when 264,000 units were turned out.

The large and continuing demand for commercial vehicles and passenger cars continued until the

mid-1950's largely as a result of backlog demand, the Korean War, and an expanding market associated with a rapidly growing population enjoying higher levels of income. One restraining factor was the special excise tax on cars which from 1949 to 1955 bounced around between 10 per cent and 25 per cent. During the period Studebaker moved to Hamilton and recommenced Canadian production while Ford moved its major assembly operations from Windsor to Oakville.

One of the areas of great concern to Ontario producers of motor vehicles and parts has been the tremendous rise in the level of automobile imports in the post-war period. It was expected that the tariff of 1936 would protect and enhance the ability of the industry and its suppliers to produce vehicles in Canada. It was not expected that a larger Canadian or Empire content of up to 60 per cent would result in a smaller share of the available market for domestic producers.

Part of the trouble seems to have arisen from the increasing popularity of the automatic-type transmission in the 1950's. This is a complex and expensive component where economical production volume exceeded Canadian requirements. As early as the mid-1950's, 40-50 per cent of new cars shipped to dealers were equipped with automatic transmissions. It became increasingly more difficult for Ontario producers to meet the content requirements necessary for duty-free parts importation and still remain price competitive when such an expensive component had to be brought in from the United States in large quantities. This difficulty, combined with a temporary saturation of demand for the relatively expensive North American-type car, meant that, after 1955-56, lower-priced imports gained an increasingly larger share of the market in Canada. By the time the industry had moved to combat the trend, with the development of the "compact" in 1959, imports had captured one-third of the market. In 1955 Canadian passenger car production peaked at 375,000 vehicles. By 1958 production had dropped to 298,000 units and by 1960 recovered to 326,000 units. Over the same period (1955-60), total vehicle imports rose markedly from 58,000 to 180,000. Rising imports were accompanied by falling exports. Dur-

⁽¹⁰⁾ Studebaker, Hudson and Packard discontinued Canadian production "and actually succeeded in obtaining a larger share of the market with vehicles imported from the U.S. than they had formerly obtained with Canadian produced vehicles . . . In addition, a number of other firms were compelled to discontinue automobile manufacturing during the depression including Graham-Paige (in 1935), Willys-Overland (1933), Durant Motors (1930), Dominion Motors (1933) and Hupp Motor Car Corporation (1939)." *The Canadian Automobile Industry*, p.8.

ing the period 1946-60, Canada was a net exporter of vehicles in only six years and from 1954 on was continuously a net importer.

The plight of the industry was recognized in 1960 with the appointment of a one-man *Royal Commission on the Automotive Industry* under Prof. V. W. Bladen. The Commissioner found, despite the fact that 98 per cent of Canadian production was then carried on by the "Big Three", that greater volume and larger economies of scale were essential for continued Canadian vehicle and parts production.

Design and research expenditures are large and continuing costs in North-American car production. Canadian companies have to a great extent relied on their American parents for this aspect of operations simply because the cost is prohibitive here. This reliance has very important implications. If vehicles are designed and engineered in the United States, so are the component parts of which the car is the finished product. The frequent model changes and model proliferation common to North-American motor vehicle production has meant that Canadian parts suppliers have often suffered in their economic struggle to supply the manufacturers. All too frequently, the parts specifications necessitate specialized equipment and machinery that are beyond the ability of the parts industry to acquire and operate economically at low volume. As a result, low-cost, high-volume domestic parts production is often unobtainable and Ontario's vehicle producers have probably undertaken more parts manufacturing directly than they would have otherwise. In sum, Canadian-produced cars suffer from higher costs attributable to diseconomies brought about in the achievement of the tariff content ruling and the necessity of importing large quantities of American parts. Canadian labour rates are lower than American but total labour costs are higher since our limited volume often denies the advantages of more efficient production machinery.

Following the plea of the Commissioner for greater specialization and streamlining in the industry, the Canadian Government in 1962 instituted a plan to boost the export of Canadian-made parts by allowing duty-free imports of automatic transmissions and parts, and stripped engines — provided the auto company exported an equivalent value of Canadian-made auto parts. In 1963 this was extended to cover all auto parts on a dollar-for-dollar basis regardless of exporting source, whether vehicle manufacturer or parts supplier. In 1960 Canada exported auto parts worth some \$3.7 million to the

United States. By 1963 this had risen tenfold to \$36.3 million and some parts manufacturers were beginning to reap economies of scale. However, parts imports from the United States rose from \$316.8 million in 1960 to \$554.7 million in 1963.

In 1961 the 7½ per cent excise tax was removed. In 1962, as a result of the exchange crisis, a temporary 10 per cent tariff surcharge was applied to imported vehicles. This was removed in 1963. These factors combined with the devaluation of the Canadian dollar in 1962 helped the Canadian automotive industry to expand export sales and increase its share of the domestic market.⁽¹¹⁾ The cyclical upswing in the economy since 1961, however, has been the prime mover advancing motor vehicle production considerably over the lows of the late 1950's. In 1960 close to 400,000 units were produced. By 1964 production had climbed to 668,000 units. To date in 1965, 480,000 vehicles have been turned out.⁽¹²⁾

The Canadian automotive tariff was designed to provide moderate protection for vehicle producers and incentives under various content rulings for the domestic manufacture of parts. While it was very useful in promoting the establishment of the industry, it has clearly outlived its usefulness as a long-term measure under today's conditions. Proposals put forward in 1964 — aimed at some form of production sharing between Canadian and United States companies under a duty-free system — were finalized in January, 1965. Under a new agreement signed by the heads of state of Canada and the United States, both countries will reciprocally drop their tariffs on newly manufactured vehicles and original-equipment parts.⁽¹³⁾ Canada abolished its tariff immediately while in the United States ratification is pending in Congress.

The agreement contains safeguards concerning existing Canadian vehicle content and represents

⁽¹¹⁾ Ontario's motor vehicle industry received two fillips in recent years with the opening of the American Motors plant in Brampton in 1962 and the move of Studebaker (American) from South Bend to Hamilton in 1963.

⁽¹²⁾ Total Motor Vehicle Production, by month, January-June, 1965 and 1964.

	1965	1964
January	66,162	72,811
February	64,409	65,029
March	90,545	69,118
April	85,325	75,332
May	84,433	71,080
June	89,506	76,243
	480,379	429,606

⁽¹³⁾ "Duty-free entry to Canada will be available only to motor vehicle producers and to parts makers producing components on order from vehicle producers." Federal Department of Industry, "News Release", January 15, 1965, p.7.

an attempt to bring more closely into alignment the present disparity between Canadian production and consumption of new vehicles. At present, Canada's share of North-American vehicle production lies in the neighborhood of 4 per cent while our consumption approaches 7.5 per cent. The Federal Department of Industry expects that the agreement will add \$250 million to the annual value of Canada's vehicle output by 1968. To achieve this the Federal government is prepared to forego \$50 million in customs revenue and the Canadian consumer is expected to forego the benefit of any immediate price reduction.

In the short run some Ontario parts suppliers will undoubtedly find their marginality brought home concretely. The majority, however, should find the necessary volume for efficient low-cost production. Also in the short run, some bottlenecks may appear in Ontario owing to temporary shortages or dislocations of skilled labour. Over the long haul, Ontario may expect a significant absolute growth in the industry while at the same time undergoing some relative decline in its share of Canadian production. The recent decision taken by General Motors to decentralize its Ontario operations by opening a plant in Ste. Therese, Quebec, may presage further decentralization on the part of other Canadian manufacturers. This may occur for two reasons. If Canada's share of total North-American vehicle production rises, decentralization will become not only economically feasible but desirable since production diseconomies set in very soon once optimum plant capacity is surpassed. Integration of North-American production may also entail a necessary reduction in the number of models manufactured in each Canadian

plant and, as a result, the scope for model concentration and geographic dispersion within the multi-plant firm will widen. All of the foregoing notwithstanding, there will not be any large exodus of vehicle or parts manufacturers from the province in the foreseeable future. There are simply too many economically compelling reasons why manufacturers will remain here — close to large factor and sales markets. Dispersion, if and when it takes place, will be a gradual process and a function of economically justified growth.⁽¹⁴⁾

In sum, parts manufacturers in the province may expect appreciable growth, vehicle manufacturers may regard the whole North-American continent as a potential market and consumers may ultimately benefit from lower vehicle prices.

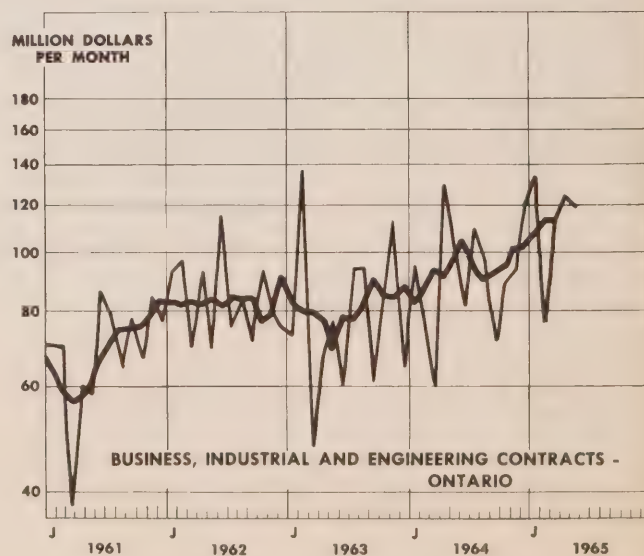
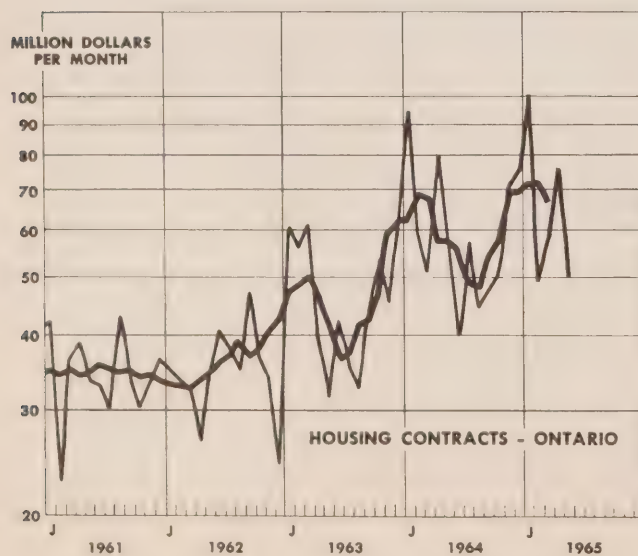
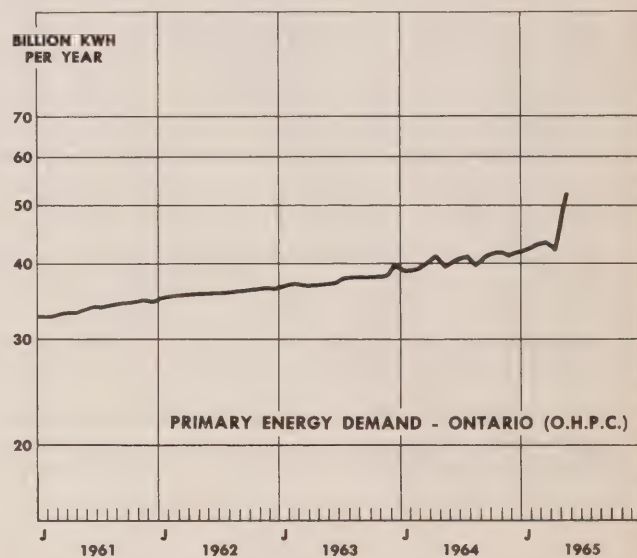
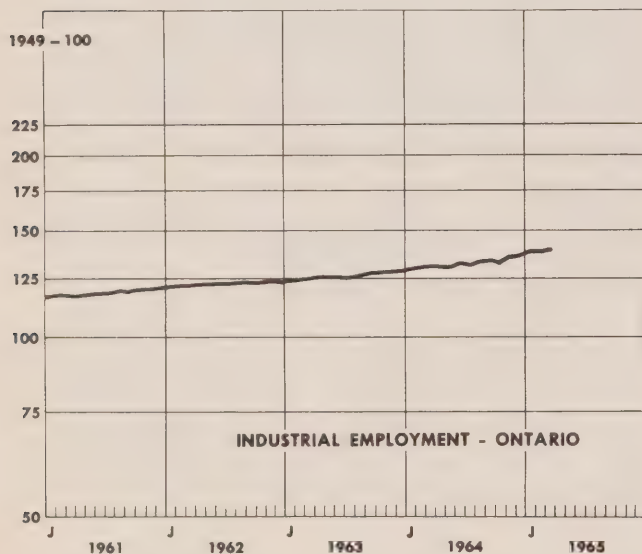
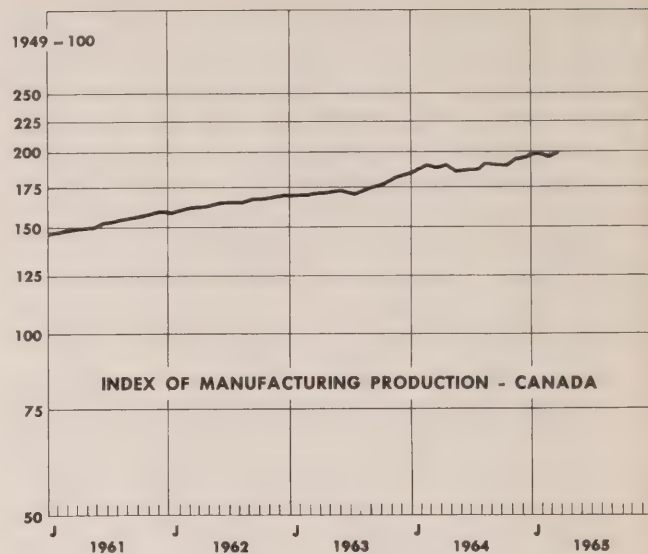
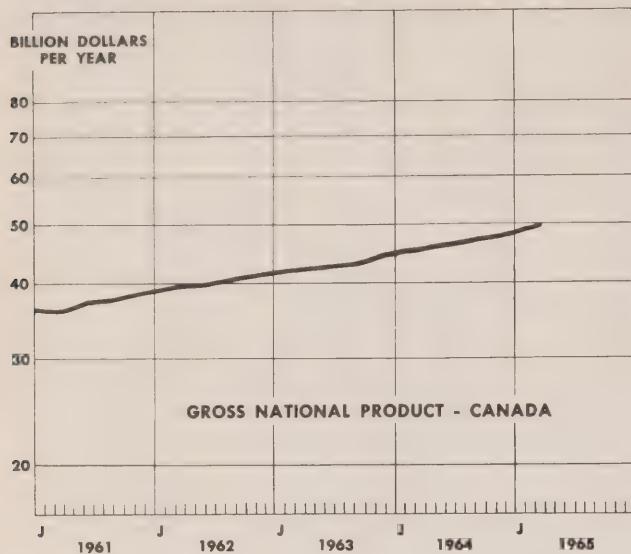
Thus, sixty years after the establishment of Canada's first automotive plant at Windsor, it appears as if the last logical step in the development of the motor vehicle industry has been taken. Once American-type cars were produced in quantity in Canada, it became only a matter of time before the basic similarities between Canadian and American tastes and economic systems would dictate that production facilities be integrated.

⁽¹⁴⁾ It is quite possible that the above interpretation is over-optimistic. A less optimistic view might read as follows: Because the Canadian automotive industry has relied to a very large extent on United States research and design talent, and because the United States has a larger pool of capital, engineering skills and technological innovation, then, over the long haul, integration in motor vehicles may result in the gradual concentration of the capital intensive operations in the United States, leaving to Canada most of the labour intensive phases. Such a phenomenon is not entirely outside our recent experience in another industry. c.f., W. G. Phillips, *The Tariff and Farm Machinery Production in Canada*, Brief to the Royal Commission on Canada's Automotive Industry, 1960.

NOTE

Primarily owing to the fact that Ontario has historically provided the bulk of Canada's motor vehicle production, data in the text refers to Canada. A statistical series covering Ontario's annual production of passenger cars, trucks and buses over the period 1904-1964 can be found in the *Ontario Statistical Review — 1964*, Ontario Department of Economics and Development.

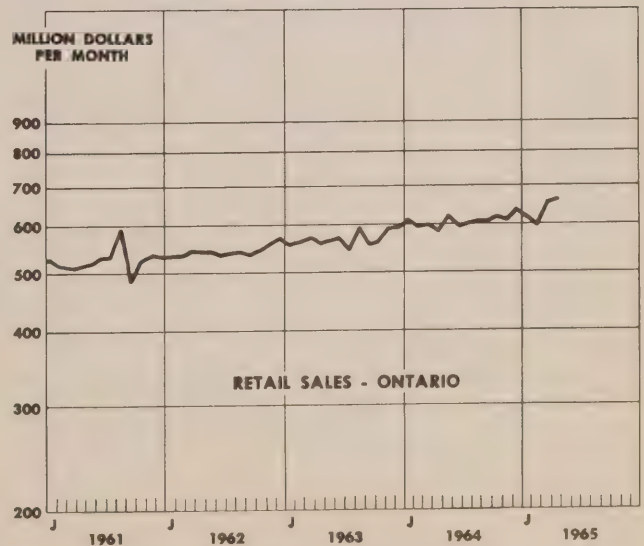
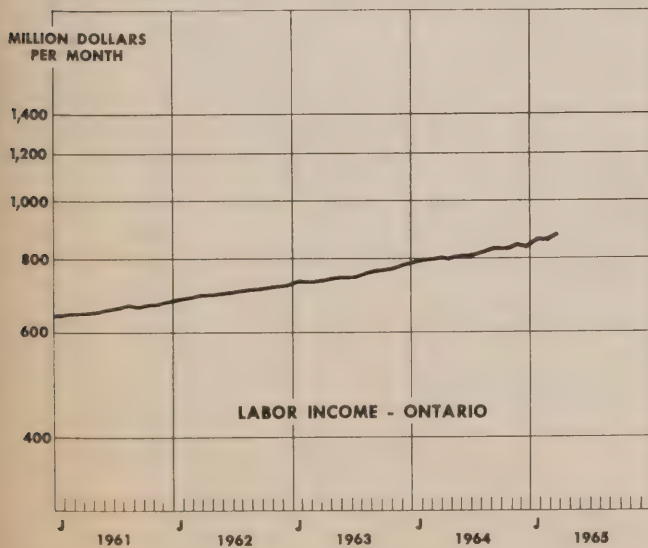
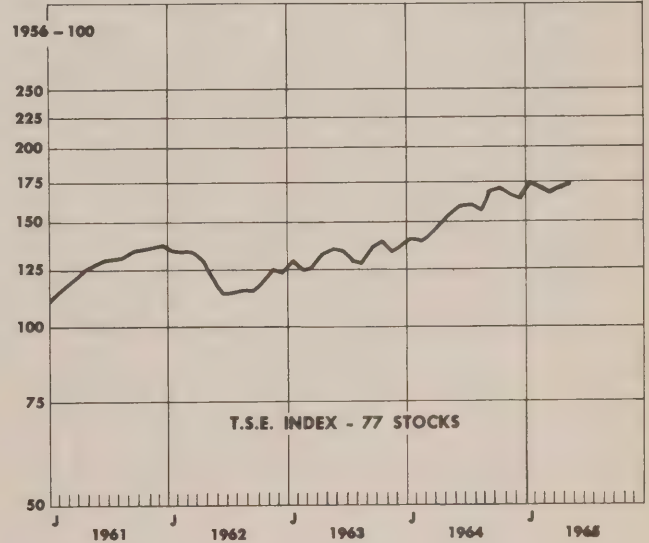
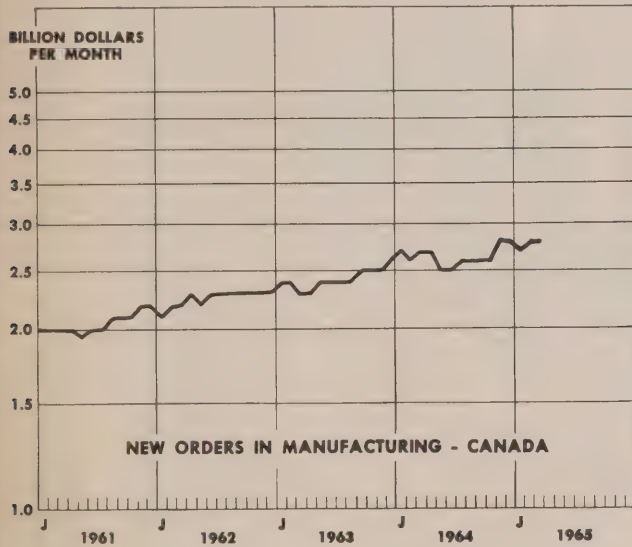
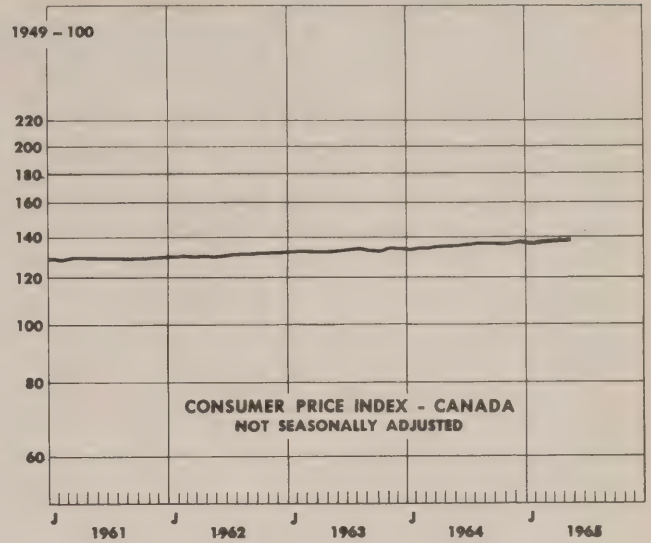
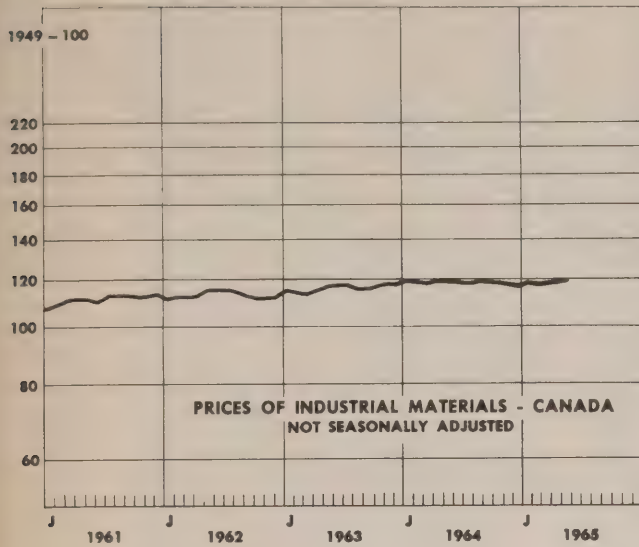
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



— TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



(*Figures for Canada)

1964 - - - - - 1965

1964 - - - - - 1965

Gross National Product*	46,684	47,392	48,016	49,676
\$ Million				

Gross National Product*	46,684	47,392	48,016	49,676
\$ Million				

ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED

ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED

(1) For a few months, the labour reports will not be adjusted for seasonal variation as recent revisions in the statistics have not been completed in the seasonally adjusted series.

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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister



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THE ONTARIO ECONOMY

Ontario Agricultural Review and Outlook*

(i) Review

Agricultural production in Ontario during 1964 reached a new high — 2.1 per cent above 1963 — and 44 per cent more than the base year, 1949. Prices of agricultural products at the farm declined 1.4 per cent. Consequently the gross value of agricultural production in 1964 was only slightly higher than in 1963.

Realized gross income of farm operators from farming operations in Ontario in 1964 reached \$1,116.2 million, an increase of \$16 million over 1963. However, operating and depreciation charges continued to increase rapidly, rising by some \$43.5 million to \$766.2 million in 1964. Therefore, realized net income from farming operations declined by about \$27 million to \$350.0 million.

These statistics reveal a situation that has been rather typical of Ontario agriculture during the last ten years. Increases in the production of agricultural products frequently are not reflected in higher returns to agricultural producers owing to declines in farm prices. In addition, the volume as well as the prices of goods and services used by farmers as inputs in agricultural production have increased yearly. The index of these costs, based on 1935-39 = 100, increased by 2.7% in 1964 to 314.7. Major increases have occurred in the costs of hired labour, fertilizer, and repairs and maintenance of buildings and machinery. In addition, agriculture has steadily increased its purchase of industrial products.

Farm cash income increased by \$10 million to

\$996.6 million in 1964. Income from the sale of all types of livestock, the main product group, was down slightly as a result of the somewhat lower prices that were associated with larger marketings. Cash income from dairy products increased by about \$13 million. Sales of fluid milk were up, even though prices were slightly higher. Prices for milk used in manufactured milk products were up in all cases. Cash income from the sale of eggs declined by \$8.3 million to \$56.1 million in 1964. A large increase in production caused prices to drop from 40 cents in 1963 to 34 cents per dozen.

Despite lower prices for most fruits, cash receipts from the sale of fruit increased by \$6 million to \$33.0 million, mainly due to higher yields. Cash income from vegetables increased considerably. In the case of onions, a lower volume of production was more than offset by higher prices, partly based on a strong export demand, especially in the United Kingdom. Cash income from the main canning crops (peas, tomatoes, and sweet corn) increased considerably, mainly due to higher yields, while prices changed only slightly. Flue-cured tobacco was the only major field crop showing a significant decrease in cash income. This was brought about by the severe drop in price and the lower quality leaf of the large 1963 crop.

(ii) Outlook

Due to cold spring weather and a serious lack of soil moisture during the early summer months of 1965, below average yields were expected for most field crops in many parts of Ontario, but particularly in the eastern counties. Relatively heavy rainfall during July has improved crop conditions greatly, so that the yields of most field crops are expected to be only slightly below normal.

**Prepared by the Farm Economics, Cooperatives and Statistics Branch, Ontario Department of Agriculture.*

Although yields of hay and pasture up to mid-July have been decidedly below average, the production of milk does not appear to have been seriously affected. The number of livestock on farms has decreased compared to last year, particularly in the main drought areas. Hogs on farms in June were 6 per cent below last year's number in Ontario, but 16 per cent below the number in Eastern Ontario. The number of cattle and calves on farms in Ontario, according to the June agricultural survey, did not change much from a year ago, but Eastern Ontario reported a decrease of at least 5 per cent.

Prices of beef cattle in Ontario have been surprisingly strong during the early part of the year, but are expected to be down somewhat in line with market expectations in the United States. Hog prices have closely followed the rising trend in the United States despite an increase in marketings in Canada during the first part of the year. These strong prices are expected to continue, allowing for a seasonal decline in the fall.

Prices of dairy products are expected to hold up well during the remainder of this year, particularly in the case of cheese. Prices of eggs to producers reached a post-war low point during the first quarter of 1965. This prompted a severe cut-back in hatchings which will probably result in a strong market for eggs during the second half of the year. Broiler supplies are slightly higher than last year, but prices have kept up well. During the remainder of the year competition from turkeys may become more serious since marketings during the summer and fall are expected to be heavy with some corresponding pressure on prices.

Production

The value of manufacturers' shipments in Ontario in May reached \$1,481 million. This is an increase of \$32 million from April and it brought to \$160 million the cumulative increase since May 1964, when the level of shipments was \$1,321 million. Much of the 12.1% year-to-year increase in Ontario comes from strength in the primary metal industries, machinery industries and in the transportation, chemical and chemical product industries.

At the national level, the seasonally adjusted Index of Industrial Production moved up half a point in May to 226.0 (1949 = 100). Most of the gain on index was attributable to increases in the output of non-durables where particular strength was evident in textiles, tobacco and rubber products and petroleum refining. The durables index remained virtually unchanged, increases in transportation

equipment, iron and steel products and electrical apparatus being offset by declines in wood products, non-metallic mineral products and non-ferrous metal products. The mining index declined approximately 4.3% largely through the influence of decreases in the output of petroleum, iron ore and nickel.

Construction

After dipping slightly in May, the seasonally adjusted value of Business, Industrial and Engineering contracts in June recovered to \$122.3 million. This marks the third month in the first half of 1965 that the monthly values of B. I. & E. contracts have exceeded \$120 million, compared to only one month in the last half of 1964. The same evidence of strength was apparent in June's seasonally adjusted value of housing contracts in Ontario. After declining some \$26 million in May, housing contracts in June rose \$21 million to \$71.2 million. The June level compares very favourably with winter values when the Federal housing bonus of \$500 was in effect.

After reaching a peak of 9,696 in March, dwelling unit completions in Ontario for April and May declined to 7,218 and 4,136 units respectively. The May 1965 figure however is considerably above the May 1964 level of 3,454 units.

In Ontario, recently announced large contracts of \$1 million and over totalled \$111.3 million in July. Some of the more significant awards are listed below.

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ Million</i>	<i>Description</i>
Ajax	3.2	Apartments
Brockville	1.2	Hospital addition
Fort William	1.0	Shopping centre
Grand Bend	7.4	Water supply system
Hamilton	2.6	Apartments
London	3.0	Pollution control plant addition
Markham Twp.	3.5	Apartments
Oakville	2.0	Petro-chemical plant
Ottawa	4.3	High school
Peterborough	4.4	University buildings
St. Thomas	1.0	Plant and office
Scarborough Twp.	10.5	Hospital
Sombra Twp.	1.5	Chemical plant extension
Sudbury	1.5	Housing
Toronto	20.8	Apartments
Toronto	4.5	Schools
Toronto	4.4	Roads
Various locations	7.8	Provincial highways

Employment

With June comes the end of the school year. The annual exodus from the school system brings many thousands of youngsters into the labour market over the summer months either as permanent entrants to the labour force or as summer casuals.

In June, Ontario's labour force numbered 2,683 thousand — up some 88 thousand from May. Over the same period employment rose 73 thousand to 2,609 thousand. As a result the number of unemployed rose by 15 thousand to a total of 74 thousand.

The unemployment rate, at 2.8% of the labour force, is still well beneath that of the early months of 1965 and compares well with June 1964 when the number of unemployed rose to 88 thousand or 3.4% of the labour force.

ARDA Aid to Manitoulin

The District of Manitoulin (population 11,000) is composed of the island of the same name (1,073 square miles) and a strip of mainland on the north shore of Lake Huron (515 square miles). The predominately rural economy of the area is largely based on the production of dairy products, beef, poultry, hogs and unprocessed wood products. The excellent fishing and the natural beauty of the District are prime recreational and tourist attractions.

In recent years the economy of the District has been jolted by a number of adverse economic events. The decline of the uranium community of Elliot Lake resulted in reduced mainland sales of Manitoulin milk and dairy products. The logging division of a large paper concern operating in the District was discontinued in 1962 while a cooperative turkey eviscerating plant at Gore Bay, suffering from management difficulties, lost the confidence of growers and turkey output declined markedly.

The major economic problems of Manitoulin stem not from a lack of exploitable resources but from resource under-utilization. Recognizing this fact, the federal and provincial governments have agreed to share the cost of a \$650,000 development program under the direction of the Agricultural Rehabilitation and Development Administration. Approximately \$250,000 will be spent to develop further the recreational and tourist facilities of the area, \$200,000 on a program of forest management and \$184,000 on the turkey industry where improvements are expected to raise production to 70,000 birds per year and to provide the Gore Bay plant with better management and processing facilities.

In the field of beef production ARDA has already established a 2,500 acre community pasture and an additional 3,000 acres are scheduled for 1966.

Finance

Throughout June, conditions on the Canadian money market remained virtually unchanged with interest rate fluctuations being confined to a narrow range. The supply of loanable funds was sufficient to meet a fairly high level of demand. The day-to-day loan rate for example, closed at a level of 3¾% — a rate which generally prevailed over the month.

Highlighting activity on otherwise dull Canadian bond markets was the floatation of a \$325 million three-part Government of Canada refunding issue. The new issue comprised two shorter-termed maturities in the form of a 10-month 3½% and a one-year 11-month 4¼% maturity — both being additions to bond issues already outstanding — while the final part was in the form of a five-year 5% bond issue. The reception accorded this refunding was only fair, and this generally served to further depress bond prices in most sectors of the market. New Canadian bond financings for the first half of 1965 totalled \$2.15 billion, an increase of some 18.3% over last year's comparable total of \$1.82 billion.

Continuing concern over the course of international events and pessimistic forecasts by some United States officials regarding the maintenance of the present level of economic activity continued to have a decisively depressing influence upon prices of investment quality equities in all sectors of the Canadian stock exchanges during most of June. The Toronto Stock Exchange Industrial Index, for example, declined to a 1965 low of 159.65 on June 28th before closing the month at a level of 163.27 — a decline of almost 10 points on Index over the month.

Canadian official holdings of gold and U.S. dollars fell by \$18.6 million during June to end the month at a level of U.S. \$2,480.1 million — the lowest level in more than a year.

The value of the Canadian dollar in terms of U.S. funds consistently declined throughout most of June. Foremost among the factors contributing to this downtrend were the increase in the demand for foreign currency by Canadians and the reduced foreign demand for Canadian dollars. From a closing value of 92.63 cents for May the value of the Canadian dollar declined to a month's low and closing value of 92.28 cents — down 0.35 cents over the period.

PERSPECTIVE ON RECENT PRICE MOVEMENTS IN CANADA

W. G. R. CAMERON

Senior Economist, Economics Branch

ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Since late 1963 when it became generally realized that U.S. income tax rates were likely to be cut, there has been speculation about the possibility, that at some point demands might begin to exceed productive capacity in the economy. Early in 1964 demand began to exceed the supply of skilled, professional and managerial labour, and now the question has arisen as to whether inflationary tendencies have been generated.

In this attempt to place recent price movements in perspective, attention will be directed first to the implicit price indexes for broad aggregates of demand, and later to price changes for classes of consumer expenditures, nation-wide and for regional cities, for general wholesale prices and for prices charged by particular manufacturing industries.

The twelve charts at the end of this article show the price statistics for the broad aggregates of demand. The horizontal bars indicate the average price level for each of the past three years. The dashed lines connect seasonally adjusted quarterly averages, and the shaded areas show the difference between the quarterly figures and the annual averages. These shaded areas highlight the movements of prices within the years.⁽¹⁾ Each chart also contains a trend line (calculated with least squares of logarithms) that is based on statistics from 1957 (the last year of post-war inflation) to 1963,⁽²⁾ and is extrapolated to 1965. The purpose of this trend line is to highlight any deviations from trend that have developed since 1963. There is also a technical reason for this approach and it will be mentioned and developed later in the article.

The Price Index for the Economy as a Whole

Chart No. I shows the statistics on the implicit price index for Gross National Expenditure. The compound annual percentage increase from 1957 to 1963 was 1.6 per cent. Since the fourth quarter of 1963 the rate of increase has risen above this trend, as is indicated by the level of the 1964 average and

by the slope of the lines linking the quarterly indexes. In 1964, the implicit price index was 0.5 per cent above the trend figure for 1964. What are the sectoral sources of this acceleration? Each of the demand sectors will be discussed in turn in order to answer this question.

Export and Import Prices

Charts XI and XII, respectively, show the statistics on the implicit price index for exports and imports of goods and services. The compound annual trend rates of increase for 1957-1963 were 1.4 per cent for exports and 2.1 per cent for imports. Since 1961 both series have risen above their trend lines, but import prices declined during the last three quarters and export prices during the last two quarters, for which data are available. The rises above trend were related to the devaluation that occurred in 1962, and the recent declines indicate the increase in international competition to supply world markets, some of which have decelerated considerably. In 1964, the annual average implicit price index for exports was 1.5 per cent above trend and that for imports was 1.0 per cent above trend, but since then import prices have slipped below trend.

Business Gross Fixed Capital Formation

Charts VII to X show the statistics for implicit price indexes of total business fixed capital investment and its components, listed in the following table:

<i>Investment Sector</i>	<i>Compound Annual Trend Rate, 1957-1963</i>	<i>% Deviation from Trend in 1964</i>
Business Gross		
Fixed Capital Formation	2.1%	1.7%
New Residential Construction	2.5%	3.5%
New Non-residential Construction	2.0%	1.0%
New Machinery and Equipment	2.1%	1.2%

The charts show that subsequent to 1962 the price indexes rose sharply above their trend lines.

In these series in particular, it is important to attend to deviations from the trend rather than the slope of the trend and level of the indexes. In the

⁽¹⁾ I am indebted to Mr. Kalman Tar, economist in the Economics Branch, for suggesting this method of charting the price movements.

⁽²⁾ Canada's vigorous expansion began in the latter part of 1963, driven by the wheat contract with the Soviet Union and by the winter housing bonus, and was subsequently reinforced through acceleration in the U.S. economy.

construction series, the price indexes are based on prices for labour and materials, for no reliable method has yet been devised for taking full account of the improvement in productivity in the industry. As a result, the price increases are overstated, but there is no way of ascertaining by what degree. Although the price indexes for machinery and equipment are measured differently, they also are uncertain. The trend lines in these series, therefore, reflect to some extent the conventions used in price measurement. However, the deviations from the trend should be a fairly reasonable reflection of new sources of price changes.

One of the reasons for the rise above trend may have been the fact that in three successive stages since mid-1963, the Federal sales tax has been extended to apply to construction materials and machinery and equipment, the last increase, on January 1, 1965 bringing the total tax to 11 per cent on these goods. It is a moot question, of course, just how much of the rise above trend has been the result of the extension of the Federal sales tax. When such a tax is imposed, the seller may try to shift it forward to the purchaser but he may be forced to absorb it and try to shift some or all of it backward to those who supply him with labour or materials. Who will bear the tax or what part of it, therefore, depends primarily on bargaining positions within any given demand situation.

Table I shows the amounts of business gross expenditure for each of the three categories of fixed capital investment in 1963 and 1964 as well as the intended program for 1965 (according to the recent mid-year survey by the Federal Department of Trade and Commerce). The percentage increases in these expenditures during 1964 and 1965 are quite high, and indicate a possibility that prices would have risen above trend even without the tax.

The fact that capital goods prices have been rising strongly in the context of a capital investment boom should not be interpreted as indicating that the general situation is an inflationary one. There are many other price series to be considered, as well as the question whether imbalances are ephemeral or are likely to be sustained.

Government Expenditure for Goods and Services

Chart VI shows the statistics on the price index for government expenditure for goods and services. The compound annual trend rate of increase for

1957-1963 was 2.8 per cent. In this series, as well, attention should be directed to deviations from trend rather than to the slope of the trend and the level of the statistics. These government expenditures are comprised almost entirely of wages and salaries and of purchases from business. Regarding the wages and salaries, no means has been found of allowing adequately for improvements in productivity (i.e. increased output per manhour). Regarding the purchases from business, these consist largely of construction and machinery and equipment, and the inherent bias in these price indexes was mentioned previously. For total government expenditure on goods and services, the deviation from trend in 1964 was 0.6 per cent.

Personal Expenditure for Consumer Goods and Services

Charts II to V show the price index statistics for this series and the components listed in the following table:

<i>Expenditure Category</i>	<i>Compound Annual Trend Rate, 1957-1963</i>	<i>% Deviation from Trend in 1964</i>
Total Consumer Goods and Services	1.3%	0.1%
Non-durable goods	1.0%	1.2%
Durable goods	0.0%	-1.5%
Services	2.1%	-0.6%

Source: National Accounts, Income and Expenditure, D.B.S.

Once more, with regard to consumer expenditure for services, the focus of attention is deviation from trend rather than the slope of the trend or level of the price indexes. It is difficult for the price statisticians to allow for the qualitative improvement in the services purchased, such as medical care. However, it will be seen that the price index for services has been running below trend.

The price index for non-durable consumer goods, including, for example, food, beverages, tobacco, footwear and clothing, has risen above trend, but the index for durable goods, including such items as automobiles, refrigerators and furniture, has fallen below trend, and the 1964 price index for total goods and services is almost precisely on the 1957-1963 trend line.

More Recent Movements in Consumer Price Indexes

Table II shows the percentage changes in price indexes over one-year spans (e.g., June 1964 to June 1965) for the components of the consumer price index.

TABLE I
BUSINESS GROSS FIXED CAPITAL FORMATION
(Millions of current dollars)

	<i>Actual</i> 1963	<i>Actual</i> 1964	<i>Intentions</i> 1965	<i>% change</i> 1964	1965
New residential construction	1,707	2,021	2,307	18.4	14.2
New non-residential construction	2,835	3,343	4,102	17.9	22.7
New machinery and equipment	3,049	3,604	4,265	18.2	18.3
Total	7,591	8,968	10,674	18.1	19.0

Source: Private and Public Investment in Canada, Outlook 1965, Mid-Year Review, Ottawa Department of Trade and Commerce.

TABLE II
CONSUMER PRICE INDEXES
Percentage Change from Year Ago

	March	May	1963 to 1964		Sept.	Dec.	March	1964 to 1965		July	<i>Compound Annual Rate 1957 to 1963</i>
			June	July				May	June		
Food	1.9	2.3	2.2	2.2	1.1	1.4	1.5	2.5	3.8	2.7	1.6
Housing	1.1	1.7	1.8	2.1	1.8	1.9	2.0	1.6	1.6	1.7	1.2
Clothing	2.6	2.7	2.6	2.9	2.8	1.8	1.5	1.9	1.8	1.8	1.2
Transportation	2.4	1.3	1.2	0.6	0.4	1.5	1.8	3.1	3.5	3.8	1.3
Health and personal care	3.4	2.9	2.8	2.9	3.1	5.4	5.6	5.0	4.8	4.8	2.7
Recreation and reading	2.5	1.8	1.4	1.8	1.2	1.4	0.7	2.0	2.4	2.0	2.4
Tobacco and alcohol	1.2	2.0	2.0	1.7	1.8	2.6	2.1	1.9	1.9	1.9	1.3
Total goods and services	1.7	2.0	1.9	2.0	1.6	1.9	2.0	2.2	2.7	2.4	1.5

Source: Price Movements, D.B.S., and Daily Bulletin of Canadian Statistical Review, D.B.S.

TABLE III
CONSUMER PRICE INDEXES FOR REGIONAL CITIES
Percentage Change June 1964 to June 1965

	<i>Food</i>	<i>Housing</i>	<i>Clothing</i>	<i>Trans- portation</i>	<i>Health and Personal Care</i>	<i>Recreation and Reading</i>	<i>Tobacco and Alcohol</i>	<i>Total</i>
Halifax	4.5	0.7	2.0	2.4	1.6	1.5	1.0	2.2
St. John	3.4	0.9	1.7	3.2	2.9	1.6	1.0	2.1
Montreal	2.1	0.5	2.3	4.8	4.5	6.0	2.8	2.4
Ottawa	3.7	0.2	0.7	1.2	6.8	1.9	1.1	1.9
Toronto	4.8	0.8	2.2	3.3	5.2	2.8	0.6	2.7
Winnipeg	3.7	1.1	1.2	2.1	3.5	0.6	8.7	2.6
Saskatoon-								
Regina	3.0	0.6	1.5	1.9	1.8	2.2	3.8	1.9
Edmonton-								
Calgary	3.6	0.6	1.0	2.6	2.2	0.3	0.8	1.9
Vancouver	3.6	-0.4	1.6	5.4	1.2	-0.3	1.3	1.9

Source: Prices and Price Indexes, D.B.S.

The table shows acceleration in the rate of increase in June this year for food, transportation, and recreation and reading, but it also shows deceleration for food and for recreation and reading in July. Clothing and housing prices have not been rising as much this year as in 1964, but it will be noted that all series except recreation and reading have been rising faster than their compound annual rates of increase from 1957 to 1963, and nearly all components have been rising faster than last year. The price rises were particularly strong in June this year in Toronto, Winnipeg and Montreal, as is shown in Table III. Table III also shows that component price increases varied from city to city. For example, food prices did not rise so sharply in Montreal, but some other prices rose considerably. There were major increases in St. John, Montreal, Ottawa, Toronto and Winnipeg for health and personal care, as well as for tobacco and alcohol in Winnipeg and Saskatoon-Regina, and for transportation in Vancouver and Montreal.

The rise in food prices was only in small part the result of increasing demand. It reflected partly bad weather in some parts of North America, such as drought in Ontario, the Atlantic provinces and northeastern United States, and frost in British Columbia, Florida and Texas; partly the change in U.S. policy towards employment of Mexican labour; partly the decline in U.S. supplies of pork, and partly the increased Canadian exports of beef, dressed beef and veal to the U.S. Of course, those who had been unemployed and are now working can purchase more food, and wage earners who are now working more steadily and longer hours can also upgrade their diet by purchasing more protein and citrus fruits, but had it not been for the special situations that affected supplies of fruits, vegetables and pork, this rise of demand probably could have been handled on the basis of usual trends to a much larger extent in most areas.

Wholesale Price Indexes

The general wholesale price index has strengthened recently, the latest data showing an increase of almost three per cent over the year-earlier level. However, this rise is from weakened levels in 1964, which were below the 1963 levels. Table IV shows price increases year-to-year for various months (e.g., March 1963 to March 1964) for goods sold at wholesale. The major increases are for non-ferrous metal products, chemical products, iron products and animal products. Although price increases have decelerated for building materials, it will be noted that the price rises are considerably higher than those

for wood products and non-metallic mineral products, many of which go into building materials. Wholesale prices have been declining for vegetable products and textile products. The sensitive price index for thirty industrial materials was running this year below every month in 1964, until June and July. It will be seen that the rises in price indexes for fully and chiefly manufactured products were running less than last year (although there was acceleration) until June and July, when prices surged in the year-to-year comparison. However, the rises in June and July were still only about two per cent over the previous year. Although there are large percentage increases for raw and partly manufactured products in June and July, these are from the relatively depressed levels of 1964.

Manufacturing Industry Selling Prices

The final series to be considered are the prices at which manufacturing industries sell their products. The year-over-year percentage changes are presented in Table V. It will be noted that there is little evidence of systematic trends towards rising prices. The statistics are available through June, and they indicate that the surge in the general wholesale price index during June was not a reflection of widespread rises, but rather a reflection of the increase for animal products, slaughtering and meat-packing and rubber goods.

Out of the 49 price index series in Table V, there are about a dozen industries in which one can find evidence of an acceleration of price increases at a high level. Such acceleration is found in slaughtering and meat packing, tobacco, cigars and cigarettes, fertilizers, soaps and washing compounds, men's factory clothing, sash, door and planing mills, iron castings, rolled iron and steel products, wire and wire goods, aluminum products and brass and copper products. There are five with high price rises that appear to be decelerating, such as woollen textiles, pulp mills, veneers and plywoods, smelting and refining, and concrete products. Furthermore, the 49 series include 15 that have had price declines and eight in which price rises have been slight and appear to be weakening. Table VI summarizes the recent tendencies in manufacturing industry selling price indexes, up until June this year.

Comparison with the 1956-1957 Period

Another approach to obtaining perspective on our recent price movements is to compare them with the price rises during the last period of post-war inflation, 1956 and 1957. It was this period of inflation in North America that led the Eisenhower

TABLE IV
WHOLESALE PRICE INDEXES
Percentage Change from Year-Ago Month

	1963-1964							1964-1965				
	March	April	May	June	July	Sept.	Dec.	March	April	May	June	July
THIRTY INDUSTRIAL MATERIALS	2.7	2.7	1.5	1.1	0.9	3.1	-0.5	-0.3	-0.9	-0.1	1.0	1.6
BUILDING MATERIALS												
Residential	7.1	10.2	10.6	7.1	6.2	5.5	5.2	7.1	3.9	3.2		
Non-residential	3.6	6.0	6.1	3.1	3.3	3.1	3.1	6.2	4.4	4.7		
GENERAL WHOLESALE PRICES												
FARM PRODUCTS												
Vegetable	1.7	0.6	-1.4	-4.7	-4.3	-4.1	-3.7	-3.5	-3.1	-3.3	-0.2	-0.9
Animal	-1.5	-0.8	-1.0	-1.2	-3.7	-3.0	1.4	2.6	2.8	4.1	7.7	9.6
NON-FARM PRODUCTS,												
TOTAL	1.7	1.8	1.8	1.8	1.7	1.7	1.4	1.5	1.7	2.2	2.2	2.2
Textile products	0.8	0.4	-0.3	0.1	0.4	N.C.	-0.9	-0.8	1.4	-0.6	-0.6	-0.7
Wood products	3.1	3.1	3.1	2.8	2.5	1.7	0.7	0.8	0.7	0.2	0.2	0.1
Iron products	0.7	0.8	0.9	0.8	0.7	1.4	1.8	1.8	3.4	4.0	4.5	4.5
Non-ferrous metal products ⁽¹⁾	2.8	3.9	3.8	4.1	3.6	5.6	6.0	5.7	4.5	7.5	7.2	7.0
Non-metallic mineral products	1.1	0.7	1.3	1.2	1.1	0.4	-0.3	0.5	0.2	0.05	0.05	0.2
Chemical products	-0.1	0.4	0.3	0.9	0.7	1.1	2.6	2.7	5.5	5.8	5.1	6.0
TOTAL GENERAL WHOLESALE	1.2	1.1	0.6	-0.1	-0.5	-0.3	0.3	0.6	0.9	1.3	2.7	2.8
Raw and partly manufactured goods	0.4	0.1	-0.7	-1.7	-2.2	-1.1	1.1	0.8	1.2	1.8	3.8	4.2
Fully and chiefly manufactured goods	1.8	1.9	1.6	0.9	0.5	0.3	-0.1	0.5	0.7	0.9	2.1	2.1
Iron products	0.8	0.9	1.0	0.8	0.8	0.4	0.6	0.7	2.4	3.2	3.8	3.8
Non-ferrous metal products ⁽²⁾	3.6	4.1	3.5	4.3	4.2	7.4	8.8	8.9	8.6	12.5	11.5	9.5

⁽¹⁾ Includes gold

⁽²⁾ Excludes gold

Source: Prices and Price Indexes, D.B.S.

TABLE V
MANUFACTURING INDUSTRY SELLING PRICE INDEXES
Percentage Change from Year-Ago Month

	1963-1964							1964-1965			
	March	April	May	June	July	Sept.	Dec.	March	April	May	June
(A)											
NON-DURABLE GOODS											
FOODS AND BEVERAGES											
Slaughtering and meat packing	3.6	-1.8	-2.1	-2.5	-5.6	-5.2	0.3	1.7	1.4	2.5	8.4
Fruit and vegetable preparations	6.3	6.7	7.7	7.2	3.9	2.3	-1.6	-1.1	-2.3	-2.5	-2.1
Flour mills	4.3	5.8	7.3	4.5	4.1	3.8	3.3	-1.3	-2.0	-2.6	-0.8
Bread and other bakery products	5.4	5.1	5.1	4.2	4.6	3.3	2.2	0.7	0.9	0.6	0.5
Distilled liquor	5.4	5.4	5.4	5.4	5.4	5.2	5.2	N.C.	-0.1	N.C.	N.C.
Breweries	2.4	2.4	2.4	2.4	2.4	2.4	0.3	N.C.	N.C.	N.C.	N.C.
Sugar refining	16.2	6.5	-12.6	-34.4	-33.6	-32.0	-50.9	-41.3	-45.2	-44.5	-32.3
TOBACCOS, CIGARS AND CIGARETTES	N.C.	N.C.	N.C.	N.C.	-0.1	2.0	2.0	3.4	3.4	3.4	3.4
RUBBER GOODS INCL. FOOTWEAR	-0.5	-1.5	-0.7	-0.4	-0.3	0.1	1.1	0.2	1.1	0.2	3.8
LEATHER PRODUCTS											
Leather footwear	0.3	0.4	0.4	0.4	0.4	1.8	2.2	2.0	2.1	2.1	2.1
TEXTILE MILLS											
Cotton yarn and cloth	-1.2	-1.1	-1.1	-0.6	-0.8	-1.0	-0.3	0.1	N.C.	0.1	0.1
Woollen cloth	11.6	11.4	11.0	11.0	11.4	11.4	6.1	2.6	2.6	2.7	2.7
Synthetic textiles and silk	1.6	0.9	0.8	0.3	-1.1	-0.4	-0.1	-0.8	0.3	0.6	0.4

(continued)

TABLE V (continued)

	1963-1964							1964-1965			
	March	April	May	June	July	Sept.	Dec.	March	April	May	June
CLOTHING AND KNITTING MILLS											
Men's factory clothing	0.8	1.6	1.6	1.6	1.6	1.5	2.6	2.9	2.3	2.3	2.3
Hosiery	0.7	0.9	0.9	0.7	0.5	N.C.	N.C.	-0.3	-0.6	-0.6	-0.5
Other knitted goods	-7.3	-7.3	-7.5	-8.3	-7.3	-7.3	-0.6	-1.0	-1.0	-1.0	-0.1
PAPER PRODUCTS											
Paper boxes and bags	2.0	2.0	2.3	1.7	1.5	1.1	0.4	-0.3	-0.2	0.5	0.4
Pulp mills	5.5	4.7	4.6	4.4	3.1	2.2	1.4	3.1	2.8	2.8	3.0
Paper mills	0.4	0.5	0.4	0.4	0.4	N.C.	-0.5	N.C.	-0.1	N.C.	0.2
PRODUCTS OF PETROLEUM AND COAL											
Coke and gas products	N.C.	N.C.	0.7	0.7	1.1	0.9	0.9	0.9	0.9	0.2	0.2
Petroleum refining	2.5	2.6	1.5	1.4	0.7	-1.0	-3.1	-2.4	-2.4	-2.4	-2.3
CHEMICALS AND ALLIED PRODUCTS											
Acids, alkalis and salts	0.1	0.6	0.4	0.3	0.5	-0.1	0.6	0.4	N.C.	-0.5	-0.3
Fertilizers	2.3	2.1	2.1	2.2	2.3	1.8	2.5	2.8	3.1	2.9	3.0
Medicinal and pharmaceuticals	-0.3	-0.1	-0.1	N.C.	-1.0	-1.6	-2.2	0.6	-0.2	-0.3	-1.1
Paints, varnishes and lacquers	-0.5	-0.2	0.3	0.3	0.3	0.1	0.1	0.7	0.5	0.5	0.5
Soaps, washing compounds and cleaners	-0.4	-1.2	-0.9	-0.5	-0.4	1.9	3.6	3.3	4.2	3.2	3.2
(B)											
DURABLE GOODS											
WOOD PRODUCTS											
Veneers and plywoods	3.3	0.3	0.8	0.8	0.9	2.7	1.4	2.7	3.3	2.3	2.5
Sash, door and planing mills	2.4	2.6	2.5	2.7	1.7	3.0	3.8	3.0	2.6	3.5	3.4
Lumber mills	5.1	4.9	4.6	2.6	0.9	0.4	-0.5	1.0	N.C.	0.2	0.9
Furniture	2.0	2.0	2.1	2.2	1.7	2.3	2.4	0.1	0.1	0.2	N.C.
IRON AND STEEL PRODUCTS											
Agricultural implements	0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.7	-0.6	-0.6	-0.6	-0.6
Heating and cooking apparatus	-0.3	0.5	0.4	1.0	0.4	-0.6	N.C.	-1.3	-1.4	-1.4	-1.5
Household, office and store machinery	0.3	N.C.	0.6	0.7	0.8	0.1	-0.9	0.2	0.2	0.2	0.5
Iron castings	0.1	-0.2	-0.2	-0.3	-0.5	-0.2	-0.1	2.1	2.3	2.6	3.0
Pig iron	N.C.	N.C.	1.1	1.1	N.C.	N.C.	N.C.	N.C.	1.0	-0.6	-0.6
Steel ingots and castings	0.3	-0.6	0.3	1.3	0.8	-1.4	2.5	-0.7	0.4	2.0	2.6
Rolled iron and steel products	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	0.1	1.0	2.8	3.3	3.5
Wire and wire goods	1.1	1.3	1.2	1.2	1.3	1.3	1.7	1.6	2.2	2.8	3.2
TRANSPORTATION EQUIPMENT											
Motor vehicles	0.6	0.8	0.7	0.8	0.8	0.7	-0.9	-1.0	-0.9	-0.7	-1.2
Motor vehicle parts industry	N.C.	0.6	0.6	0.6	-0.3	-1.0	-0.4	0.4	-0.1	-0.4	0.5
NON-FERROUS METAL PRODUCTS											
Aluminum products	3.1	3.6	3.6	3.7	3.7	3.3	2.4	2.7	3.1	3.1	2.7
Brass and copper products	1.2	4.0	4.2	3.4	3.2	8.7	10.9	10.6	7.7	13.6	14.0
Smelting and refining	6.7	7.9	9.5	9.9	10.4	10.1	7.7	6.0	3.6	2.6	2.0
ELECTRICAL APPARATUS AND SUPPLIES											
Heavy electrical machinery	0.8	1.7	0.9	1.6	-0.4	0.4	-1.4	-2.6	-2.8	-1.8	-1.3
Refrigerators, vacuum cleaners and appliances	-2.2	-2.8	-2.7	-2.2	-2.2	-2.2	-2.2	N.C.	0.1	0.1	-0.1
Wires and cables	4.4	5.7	4.9	4.8	4.4	8.2	9.1	6.7	4.5	8.6	8.5
NON-METALLIC MINERAL PRODUCTS											
Artificial abrasives	0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.1	-0.1	0.1	-0.1
Concrete products	5.2	5.3	5.1	3.4	3.1	4.2	2.6	5.1	4.4	4.3	4.4
Clay products and domestic clay	-0.2	0.7	0.7	0.7	0.7	0.7	-0.1	0.6	1.0	1.0	1.0

Source: Prices and Price Indexes, D.B.S.

administration and the Federal Reserve Board in the United States to clamp down hard on the 1959 expansion, bringing the expansion to a premature close in 1960. By restraining the expansion in aggregate demand, the U.S. government held business to high unit cost and low profit levels of underutilization of capacity, and business therefore had little incentive to expand capacity. This situation resulted in low U.S. demand on Canadian resources. During the present expansion, the U.S. administration and Federal Reserve Board have encouraged expansion in aggregate demand, so that business has been lifted to the lower unit cost and higher profit levels of optimum utilization of capacity, with further increases in demand in sight. As a result, business has had a strong incentive to increase capacity. Canadian expansion has taken place within the context of this buoyant economic situation in the U.S. during 1964 and 1965.

The question one may ask is how Canadian price movements during the recent growth acceleration compare with those during the 1956-1957 period which led to the restraints on North American expansion. The comparisons are set out in Table VII. It is clear that the one sector in which price movements have not compared favourably (through the first quarter this year, seasonally adjusted) with the 1956-1957 period, has been business gross fixed capital formation. There are three main reasons for this result. In the first place, the most rapid expansion has been in demand for investment goods. Second, there has been the \$500 winter housing bonus which has helped raise prices on houses. Third, there has been the extension of Federal sales tax to construction materials and machinery and equipment.

It might be thought the rise of 2.7 per cent for GNE from the first quarter 1964 to the first quarter 1965, seasonally adjusted, does not compare particularly favourably with the rise of 3.0 per cent in 1957. The reason for this is that imports are deducted from total domestic and export demand to obtain GNE, and in 1957 there was a strong import price rise to be deducted, whereas this year there was a negative import price change to be deducted from, which means a net addition to the GNE price change. By adding imports back in and deducting exports, we obtain results that indicate the price changes that were occurring in the domestic markets. The calculations show prices rose 2.2 per cent in both the recent periods for Gross Domestic Expenditure compared with considerably higher rises in the period of inflation. It is clear that there has been considerable improvement regarding stability of domestic market prices (GDE), particularly in terms of imported

goods and services, government expenditure for goods and services, and consumer goods and services—at least up to the first quarter this year, seasonally adjusted.

Unfortunately, however, the statistics of the implicit price indexes for consumer goods and services in the national accounts, as shown in Table VII, do not extend beyond the first quarter of this year, seasonally adjusted. A comparison using the consumer price index, also published by D.B.S., is shown in Table VIII.

The statistics of percentage change in Table VIII show there is considerable difference in mixture between the last post-war period of inflation and the price rises from the period just prior to the present boom to the latest price statistics in the boom. Regarding the total index, over the two-year period from 1955 to 1957 the rise in the aggregate was 4.7 per cent, and from May, June, July 1963 to May, June, July 1965 the rise was 4.4 per cent. The price rises for clothing and for tobacco and alcohol have been sharper, while the rise for housing has been identical. The price increases for food and for health and personal care have been somewhat less in the current boom. The major difference has been in transportation, owing to the steady declines in prices of new motor vehicles in this cycle.

Conclusion

Several different approaches have been utilized in the attempt to put recent price movements in perspective. In comparing them with the trends from 1957 to 1963 extrapolated into 1965, all series except consumer durables and consumer services were found to be running above their trends from the slow growth period. Recent declines in export and import prices were also noted, with import prices dropping below trend in the latest quarter. The most marked deviations above the trends were found in the investment category where the boom has been most noticeable. At this point the statistics on the full range of aggregate trends are available only up to the first quarter, seasonally adjusted.

The statistics on manufacturing industry selling prices are available through June of this year, and up to that point it would have been difficult to detect any systematic tendency towards generally rising prices in manufacturing.

Most wholesale price indexes are available to July. The indexes show a considerable discrepancy between building materials, on the one hand, and wood products and non-metallic mineral products, on the other. However, the building materials rise slowed down in the April-May period. The general

TABLE VI
SUMMARY OF RECENT TENDENCIES IN PRICE INDEXES, BY INDUSTRY

<i>Accelerating at a high level</i>	<i>Accelerating at a low level</i>	<i>Decelerating at a high level</i>	<i>Decelerating at a low level</i>	<i>Declining</i>
Slaughtering	Leather	Woollen	Bread	Fruit and vegetable
Tobacco	Cotton	Pulp mills	Distilled liquors	Flour mills
Rubber	Synthetic textiles	Veneers	Breweries	Sugar
Men's clothing	Paints	Smelting	Paper boxes	Hosiery
Fertilizers	Steel ingots	Concrete	Paper mills	Other knitted goods
Soaps	Refrigerators		Coke and gas	Petroleum
Sash and door	Clay		Lumber	Acids
Iron castings			Furniture	Medicinal
Rolled iron				Agric. implements
Wire (iron)				Heating apparatus
Aluminum				Pig iron
Brass				Motor vehicles
Wire (N-F)				Motor vehicle parts
				Heavy elect. equip.
				Abrasives

Note: "High level" refers to a substantial rise over 1964, and "low level" refers to a modest rise over 1964.

TABLE VII
YEAR-TO-YEAR PERCENTAGE INCREASES IN IMPLICIT PRICE INDEXES FOR CANADA

	1955-1956	1956-1957	1963-1964	<i>IQ 1964 to IQ 1965</i>
Consumer Goods and Services, total	1.8	3.4	1.5	1.4
Non-durable goods	1.0	2.7	1.7	0.9
Durable goods	1.3	4.2	-1.1	-0.8
Services	3.1	4.3	2.2	2.9
Government Expenditure for				
Goods and Services, total	5.5	5.2	2.6	2.9
Current expenditures	5.9	5.3	N.A.	N.A.
Capital expenditures	4.8	4.7	N.A.	N.A.
Business Gross Fixed Capital				
Formation, total	5.3	3.5	3.6	4.6
New residential construction	3.7	2.7	5.7	5.2
New non-residential construction	5.3	3.0	2.7	4.6
New machinery and equipment	6.2	4.6	3.2	4.7
Exports of Goods and Services	2.8	-0.5	2.3	0.6
Imports of Goods and Services	3.2	2.7	1.7	-0.8
Gross National Expenditure	3.9	3.0	2.3	2.7
Gross Domestic Expenditure	3.9	3.6	2.2	2.2

Source: National Accounts: Income and Expenditure, D.B.S.

TABLE VIII
PERCENTAGE INCREASES IN CONSUMER PRICE INDEXES FOR CANADA

	1955-1956	1956-1957	1963-1964	<i>May, June, July 1964-1965</i>	<i>Two-Year Periods 1955-1957</i>	<i>May, June, July 1963-1965</i>
Food	1.2	4.6	1.6	3.0	5.8	5.2
Housing	1.5	2.0	1.6	1.6	3.5	3.5
Clothing	0.6	-0.1	2.5	1.9	0.5	4.6
Transportation	4.1	5.4	1.1	3.5	9.6	4.5
Health and Personal Care	2.6	6.3	3.3	4.9	9.1	7.9
Recreation and Reading	2.2	3.6	1.7	2.1	5.9	3.8
Tobacco and Alcohol	0.3	1.6	1.8	1.9	1.9	3.9
Total	1.5	3.2	1.8	2.4	4.7	4.4

Source: Canadian Statistical Review, D.B.S.

wholesale index began accelerating towards the end of 1964, but by May 1965, it was little more than one per cent above the year-ago level — then sharp rises appeared in June and July. There is little sign of this latter acceleration among the non-farm product components available for this period. The main accelerating component is animal products, although there is additional evidence in the sudden rise in June and July for the thirty industrial materials. The acceleration in prices for both raw and partly manufactured products and fully and chiefly manufactured products is a reflection to some extent of the declines and slow rises at mid-year 1964, and otherwise primarily reflects price rises for animal products, slaughtering and meatpacking, and rubber goods.

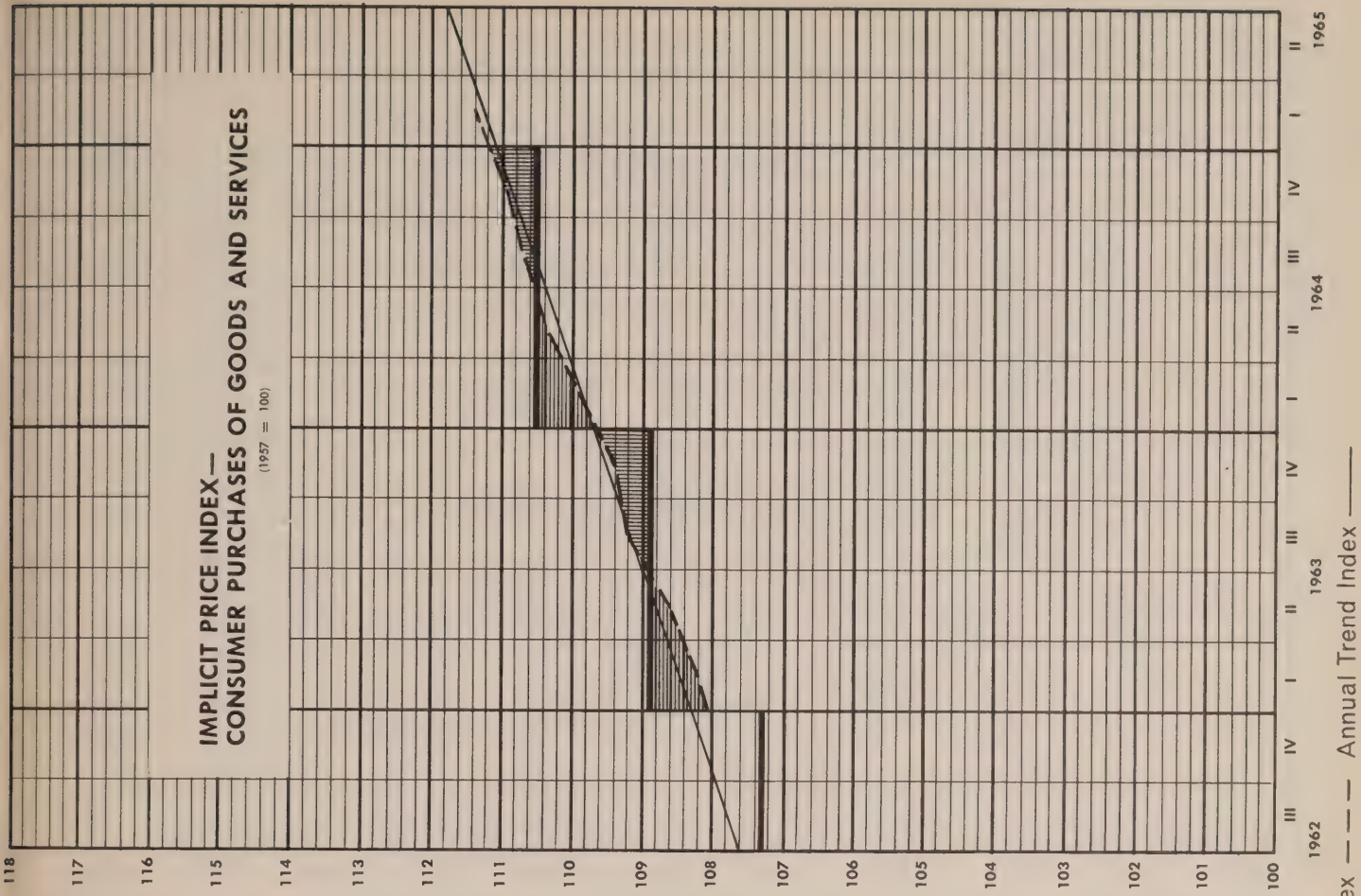
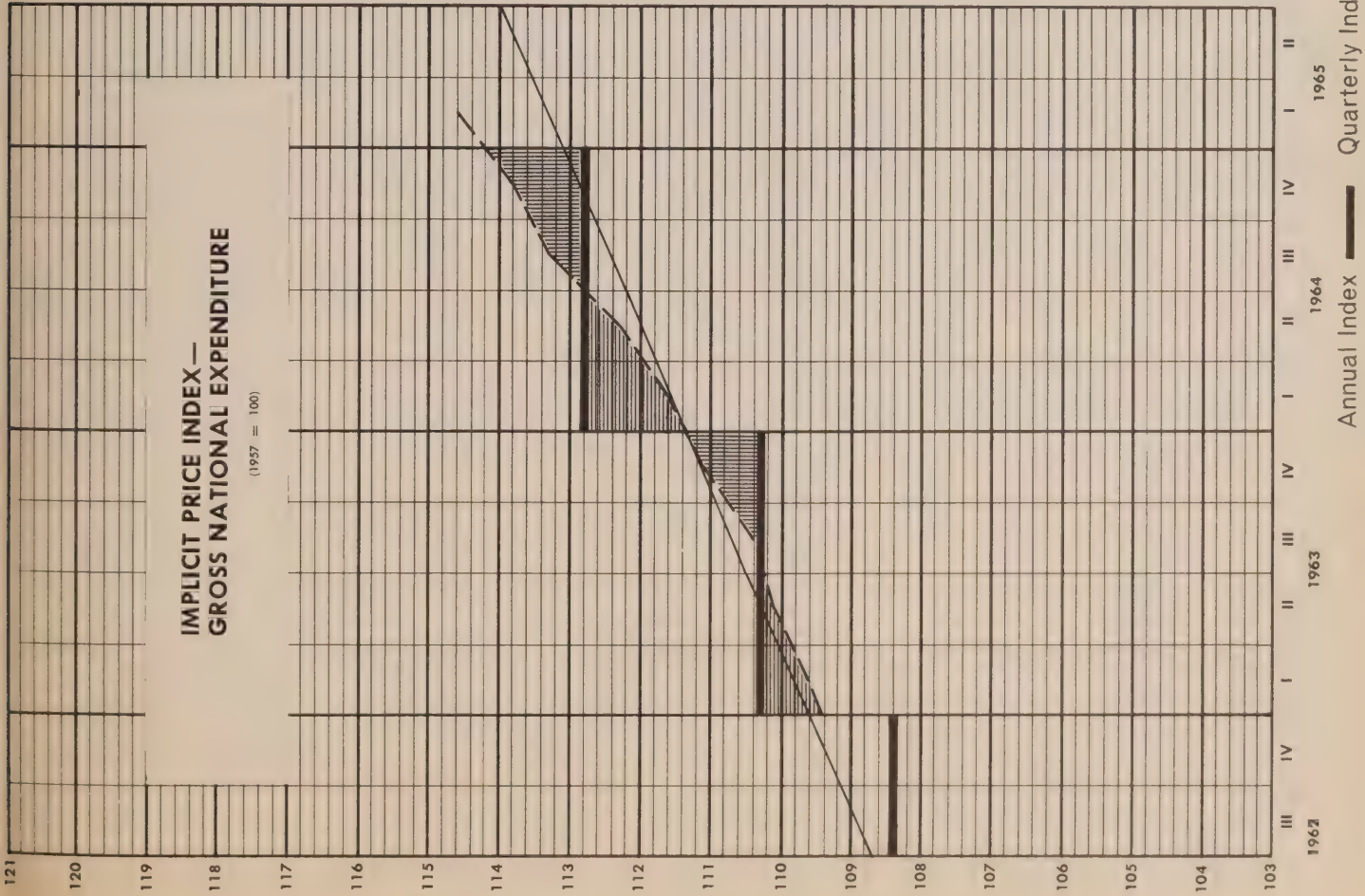
In the comparison with the period of inflation (1956 and 1957) one finds relative stability to the first quarter this year except in business gross fixed capital formation. But later evidence on the consumer price index seems to indicate the emergence of some price acceleration around mid-year.

The pressure on supplies of skilled labour, as well as prices in the construction industry, have led the Federal government to announce postponement of five construction projects in major urban centres, to stretch out the period during which it will share costs of construction for the Trans-Canada Highway, sewage treatment projects and technical and vocational schools, as well as to advise close scrutiny of construction programs, and delays where scrutiny indicates this may be advantageous.

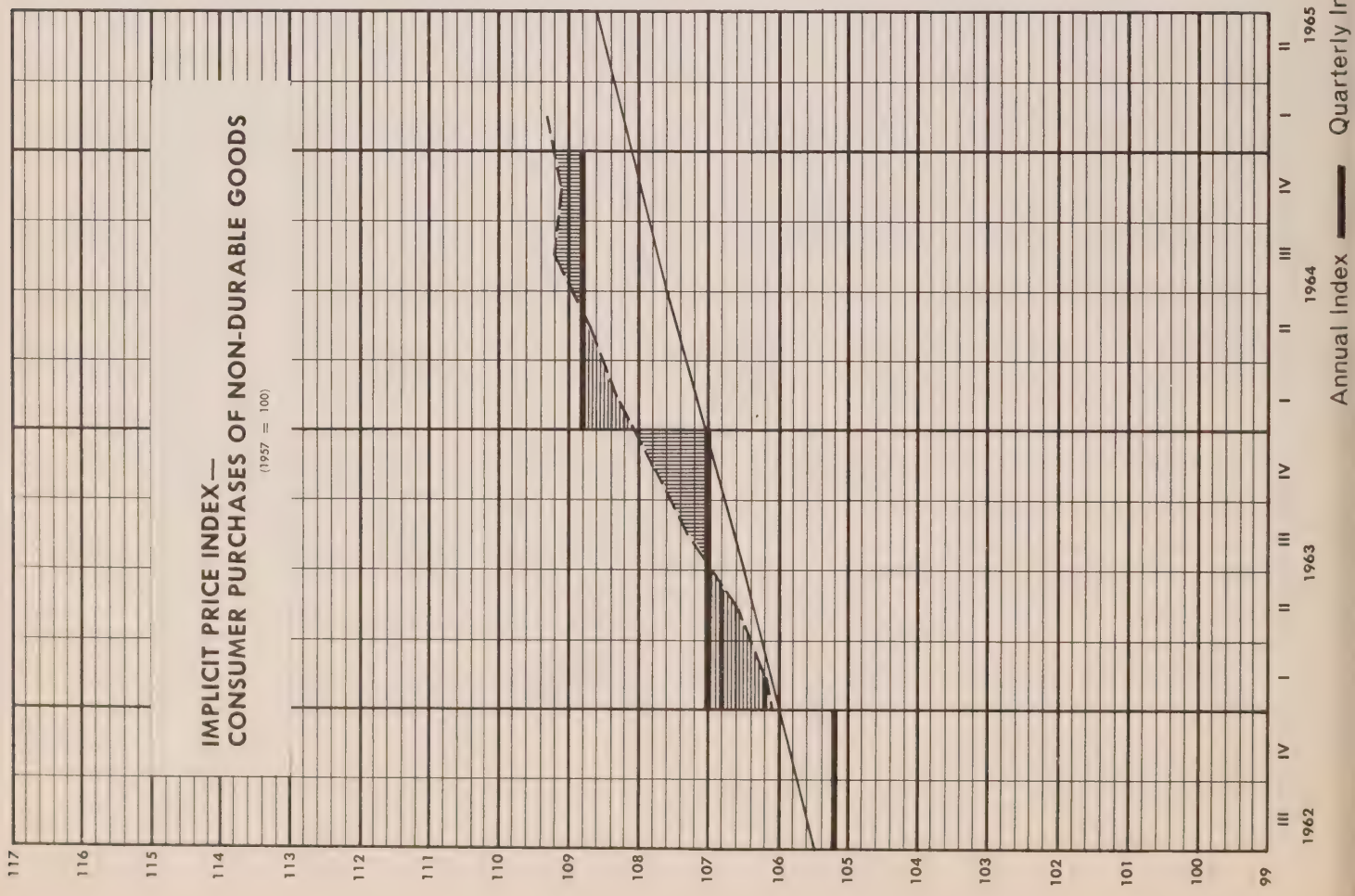
These are wise and cautious moves. The postponement of the five Federal projects will do no harm and they can be set in motion later as the situation permits. In the meantime, potential pressure has been relaxed a little in heavily committed urban areas, giving the construction industry a bit more time to mobilize its labour and equipment.

Furthermore, the provincial and municipal governments will be reassured by the extended period of availability of cost-sharing, and it is always a good idea to scrutinize one's plans as to timing and scope when one encounters a changing situation. This is a flexible approach that leaves other decision-makers in a position to make pragmatic assessments and choices.

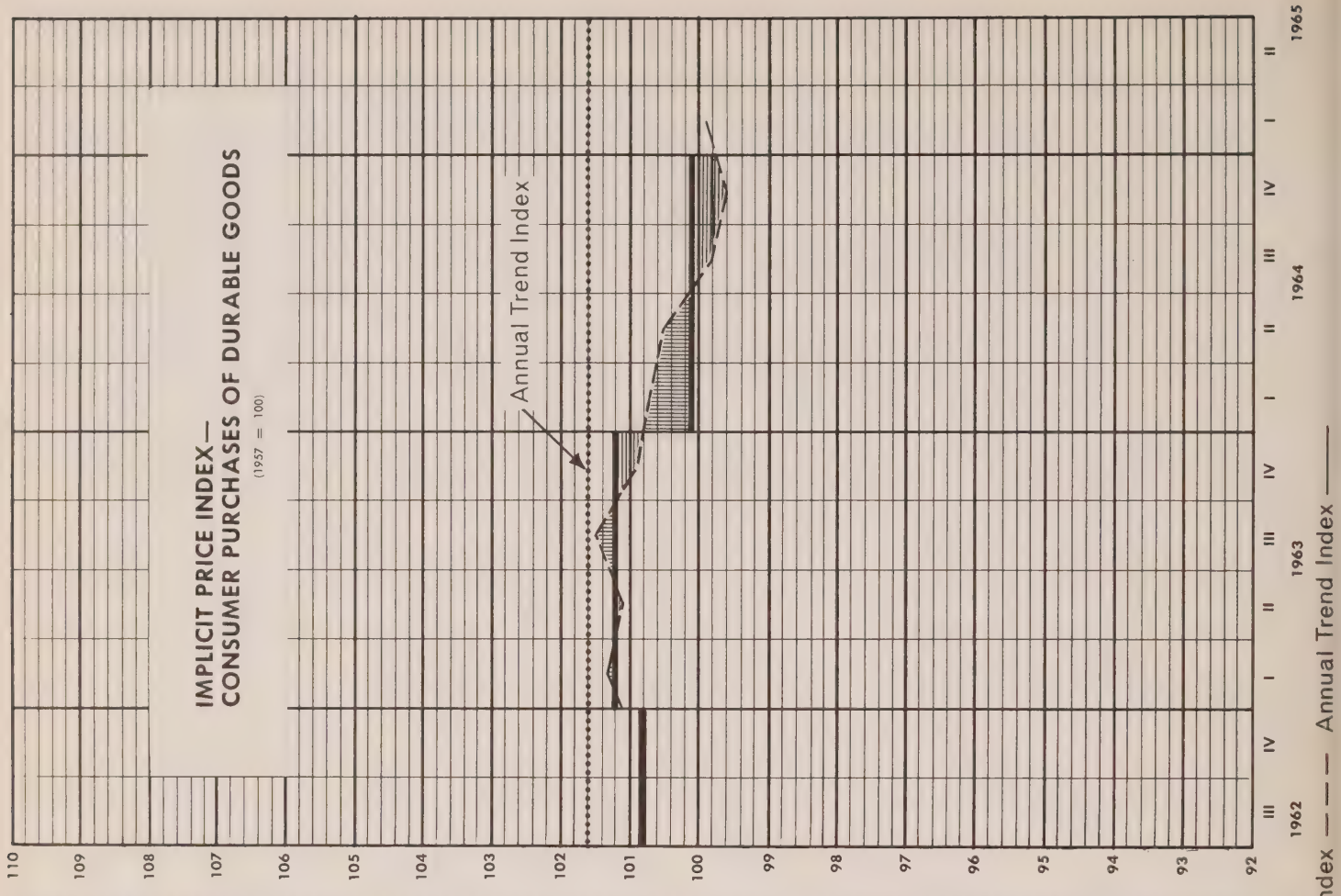
This does not mean that all problems have been resolved. The new Soviet wheat and flour contract plus the Vietnam War (depending on its duration and requirements) will tend to sustain growth in demand on Canadian labour, capital facilities and resources. But Canada, in common with the rest of the world, is confronted with a scarcity of qualified labour. The shortage of skilled, professional and managerial labour extends throughout all industrial sectors. There is no easy and quick solution to this situation. It is being confronted vigorously, but the problems are complex and require time. In the meantime, it is necessary to conserve labour by maintaining low inventories and obtaining maximum organizational efficiency, and to try to raise the productivity of the current labour supply also through avoiding misallocation of resources as well as through providing advanced technology. One implication of this requirement is that investments designed to make significant improvements in productivity and supply should be pressed forward, but that one would expect there would be close scrutiny, for the time being, regarding additional more-speculative plans for those urban areas that are already heavily committed. Outside these particular major urban areas there is not so much pressure on resources. Next year there should be a substantially larger increase in the labour force and the construction industry will be in a position to achieve further large gains in output on top of the 30 per cent increase during 1964-1965.

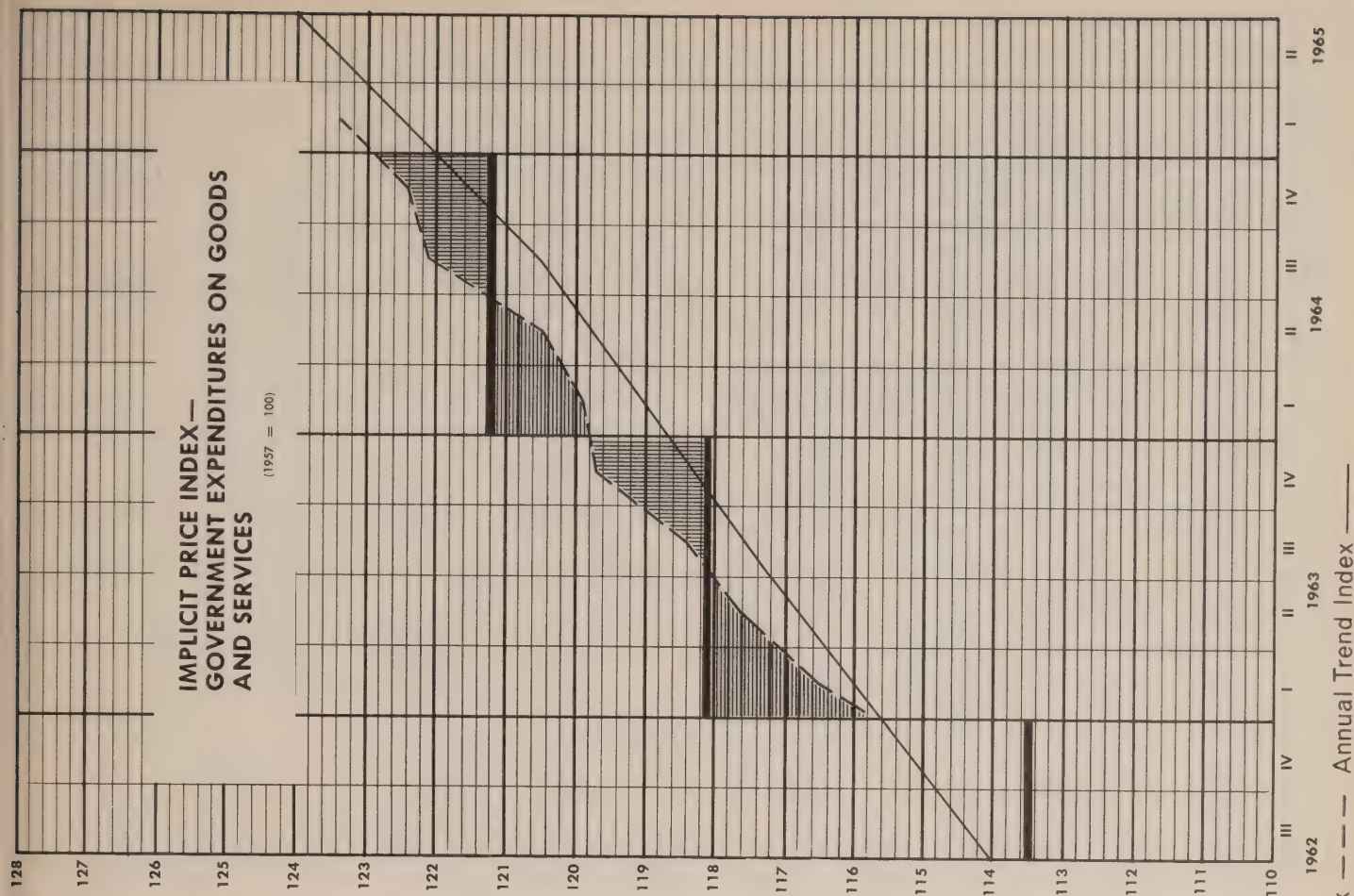
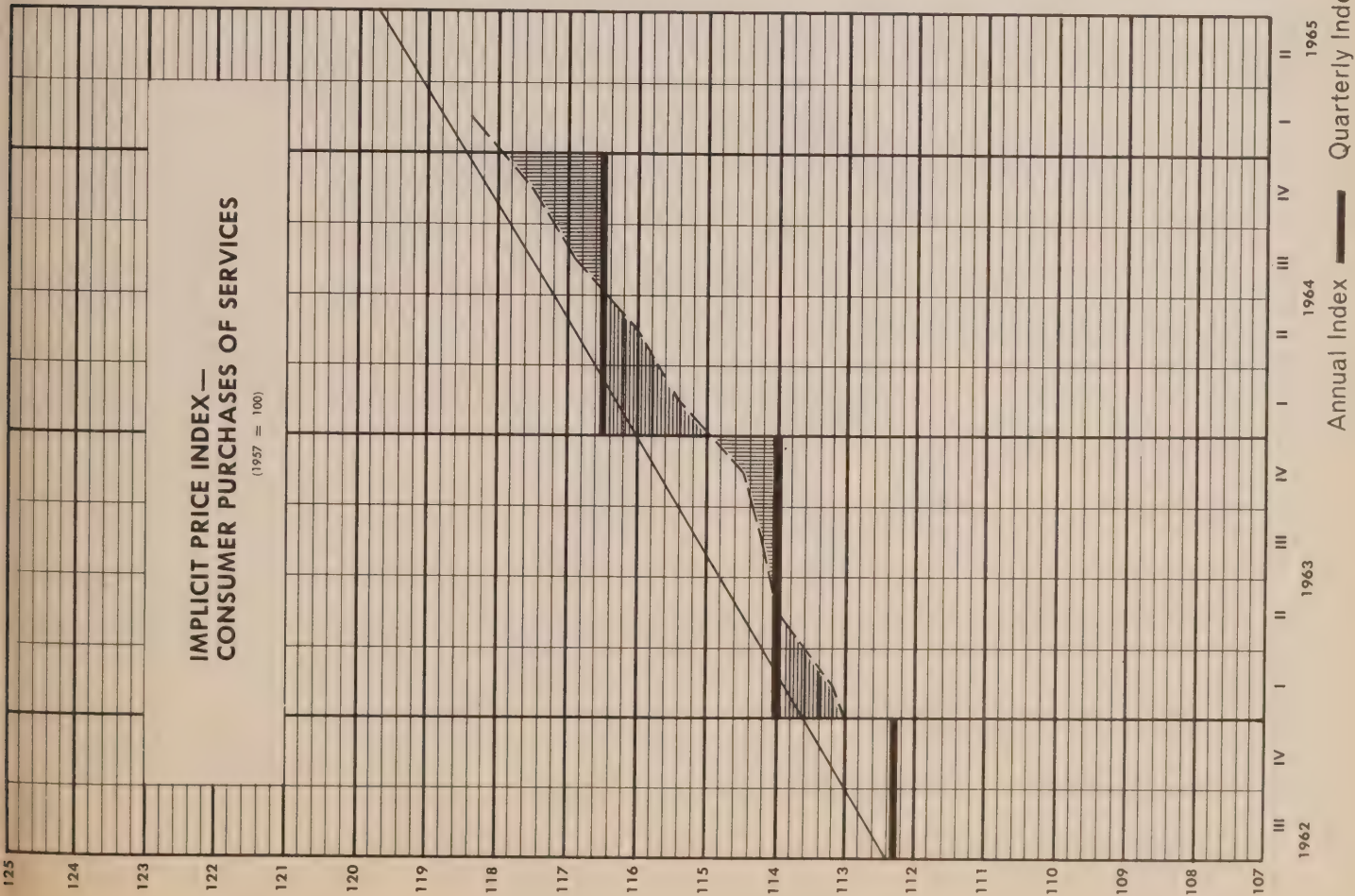


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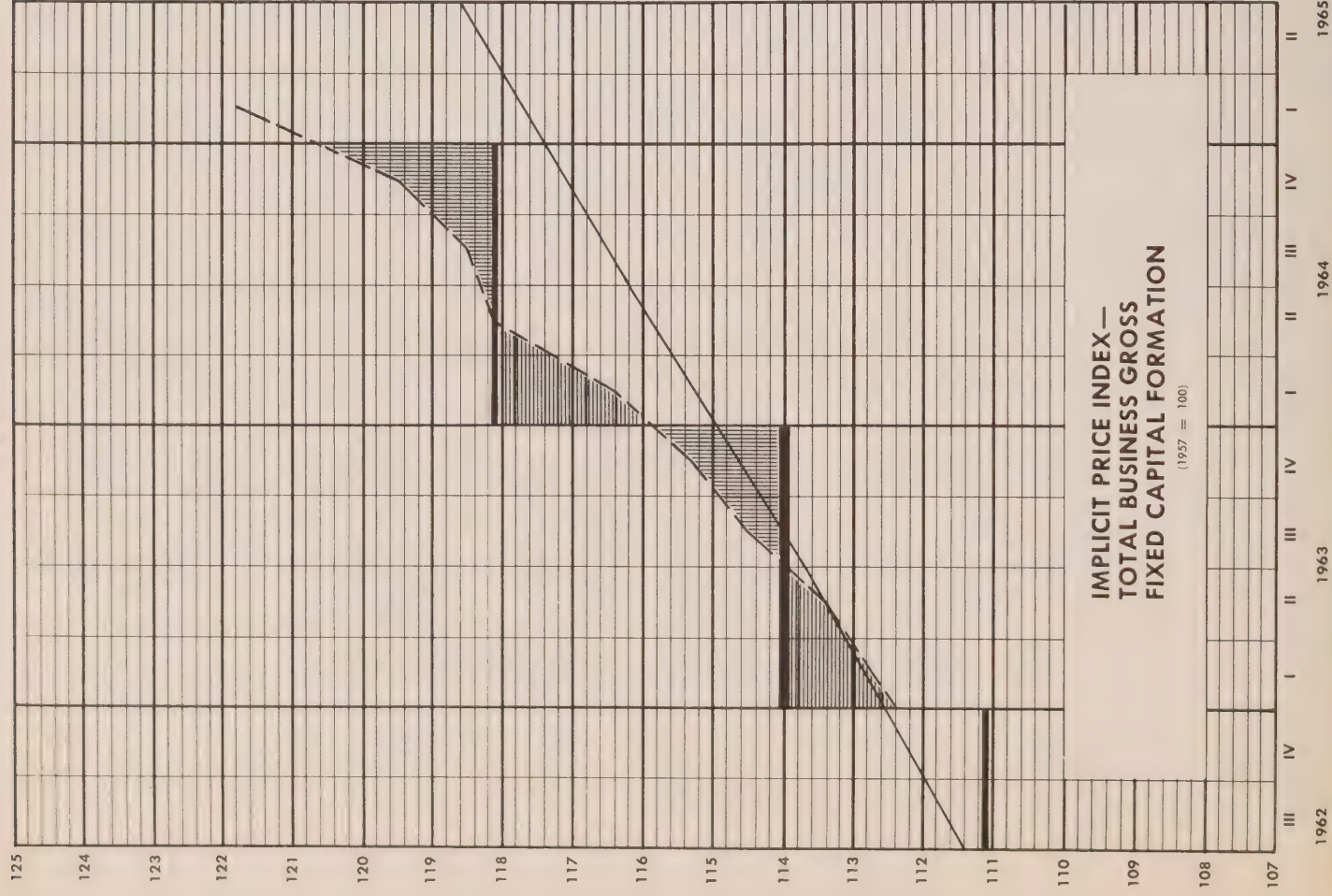


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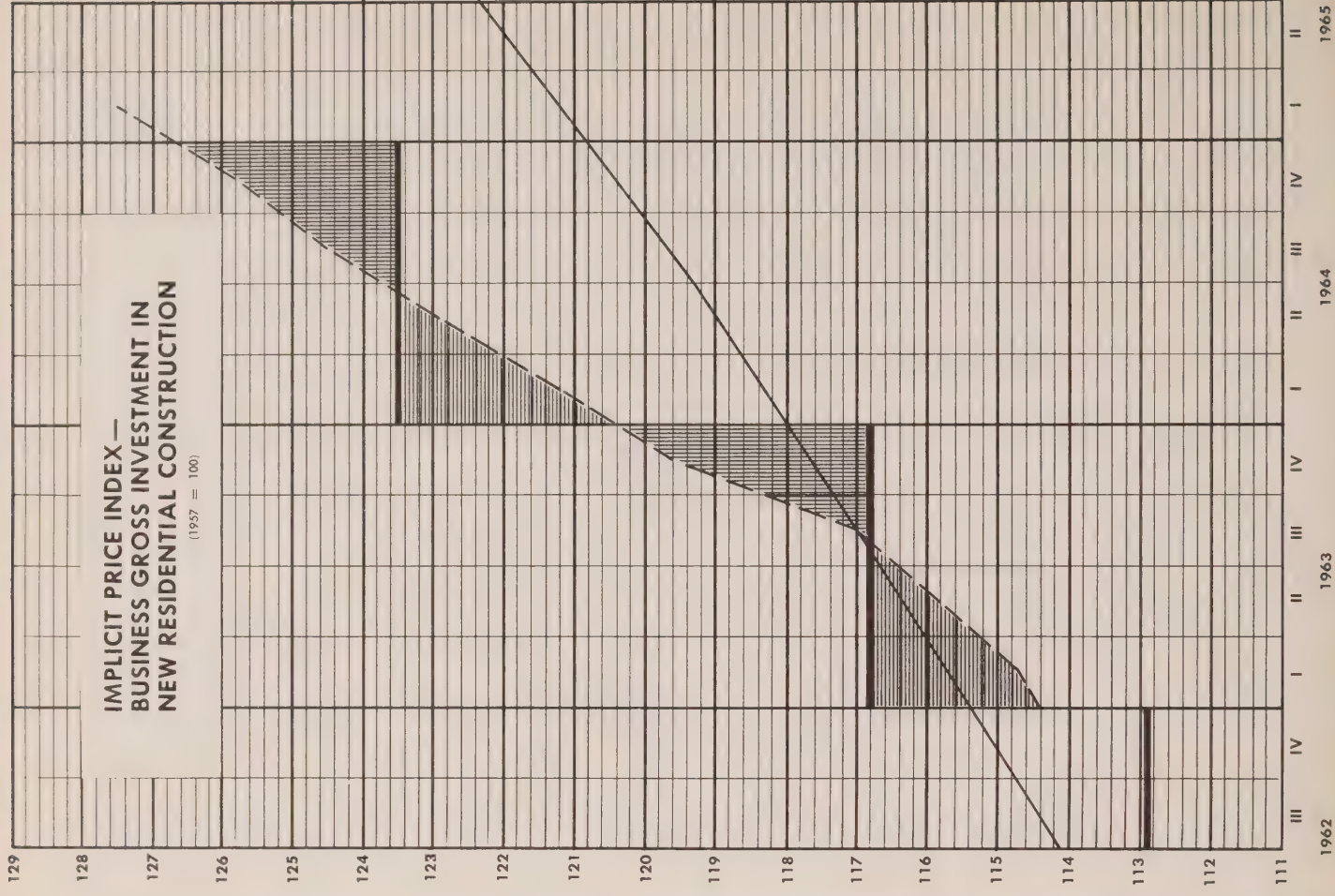




VII



VIII

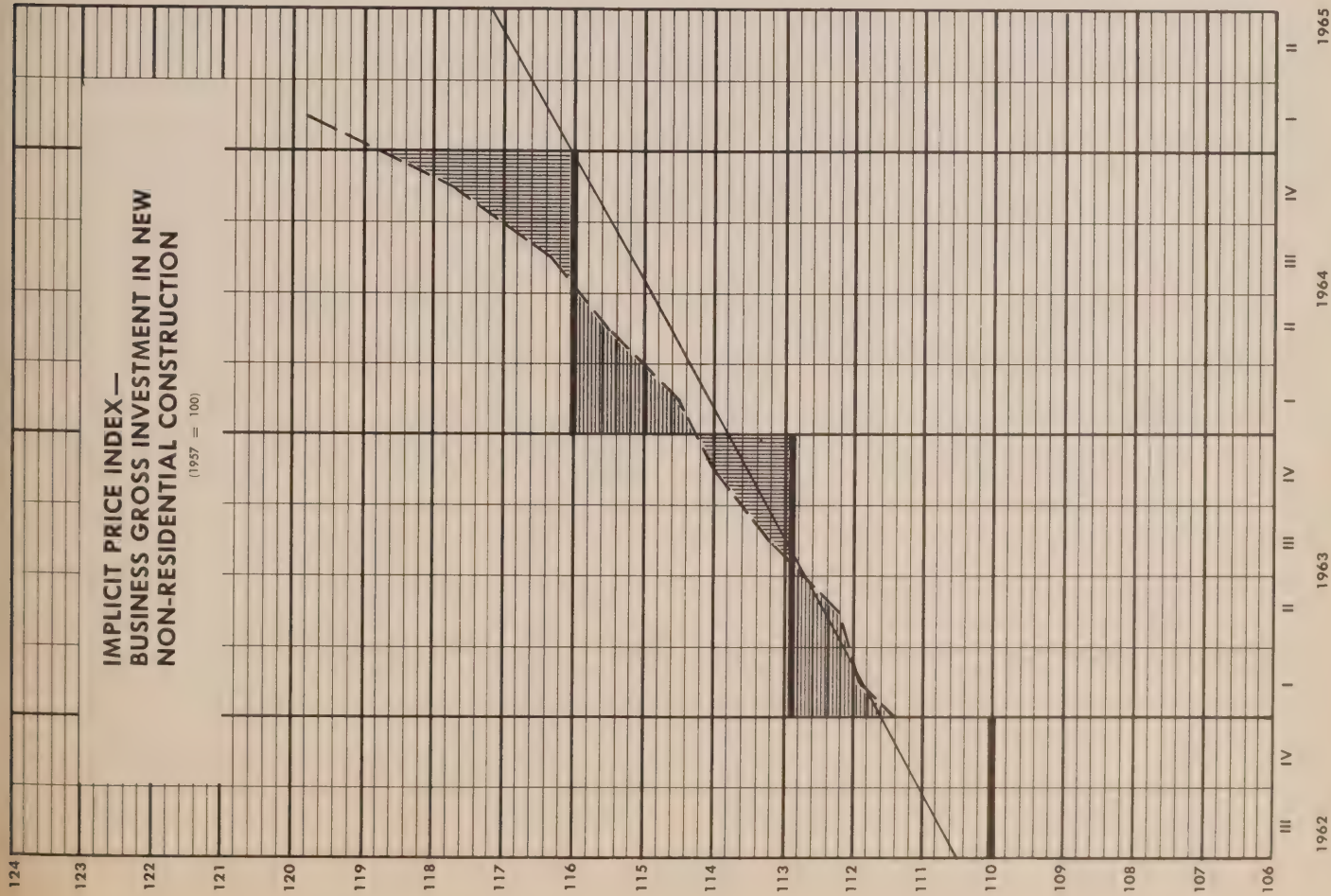


Annual Index — Quarterly Index — — — Annual Trend Index — — —

IX

**IMPLICIT PRICE INDEX —
BUSINESS GROSS INVESTMENT IN NEW
NON-RESIDENTIAL CONSTRUCTION**

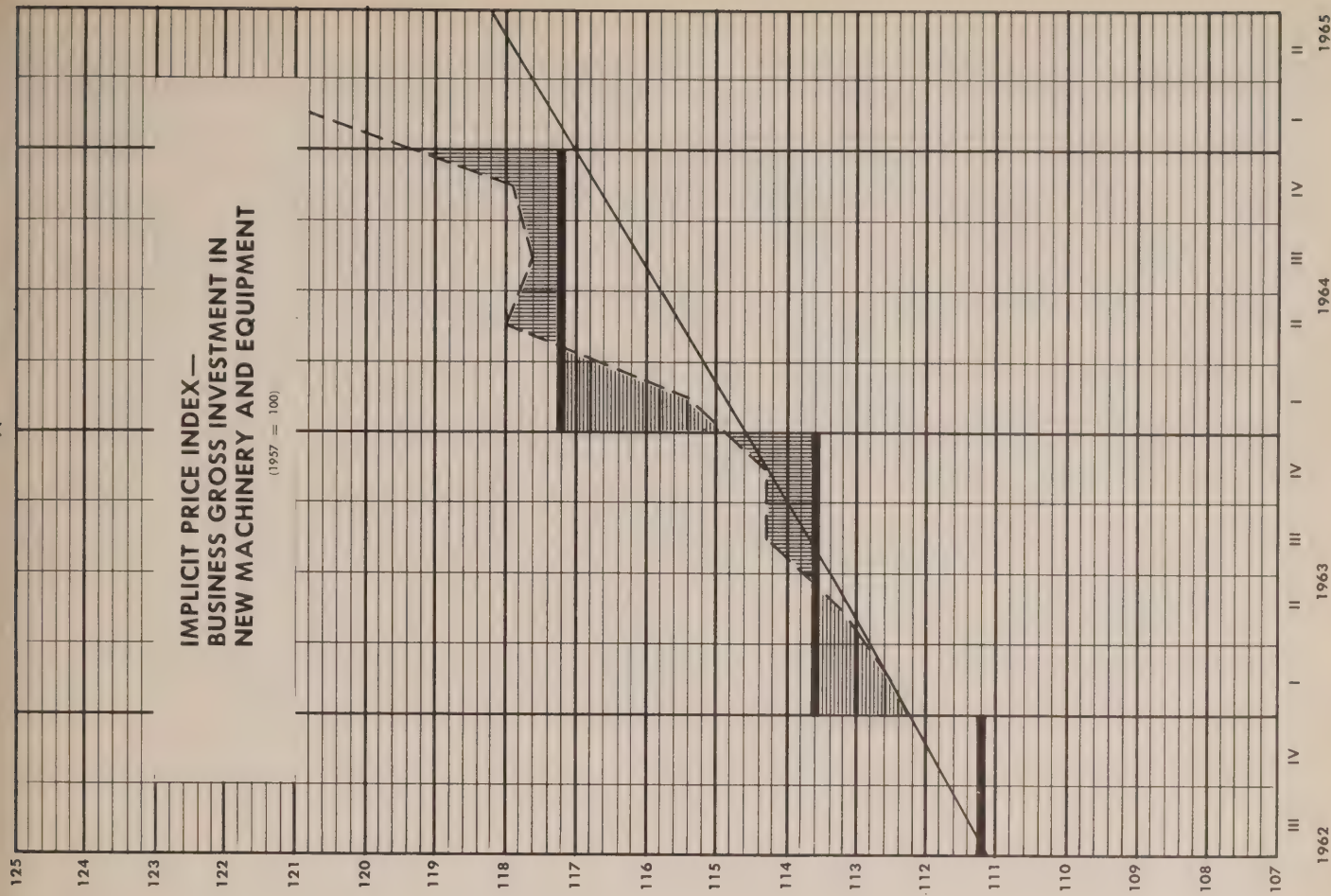
(1957 = 100)



X

**IMPLICIT PRICE INDEX —
BUSINESS GROSS INVESTMENT IN
NEW MACHINERY AND EQUIPMENT**

(1957 = 100)

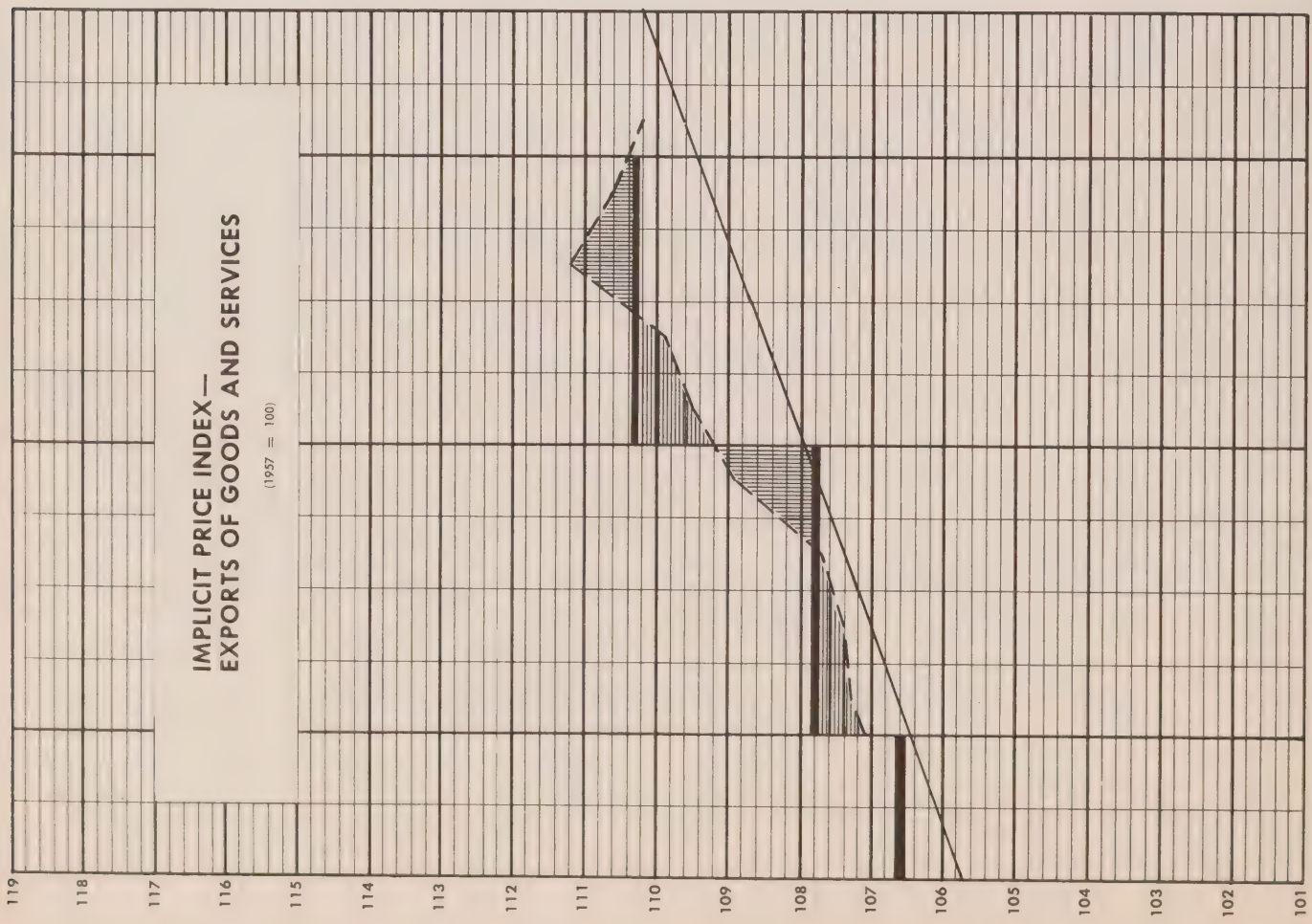


Annual Index — — — — — Annual Trend Index — — — — —

XI

IMPLICIT PRICE INDEX —
EXPORTS OF GOODS AND SERVICES

(1957 = 100)

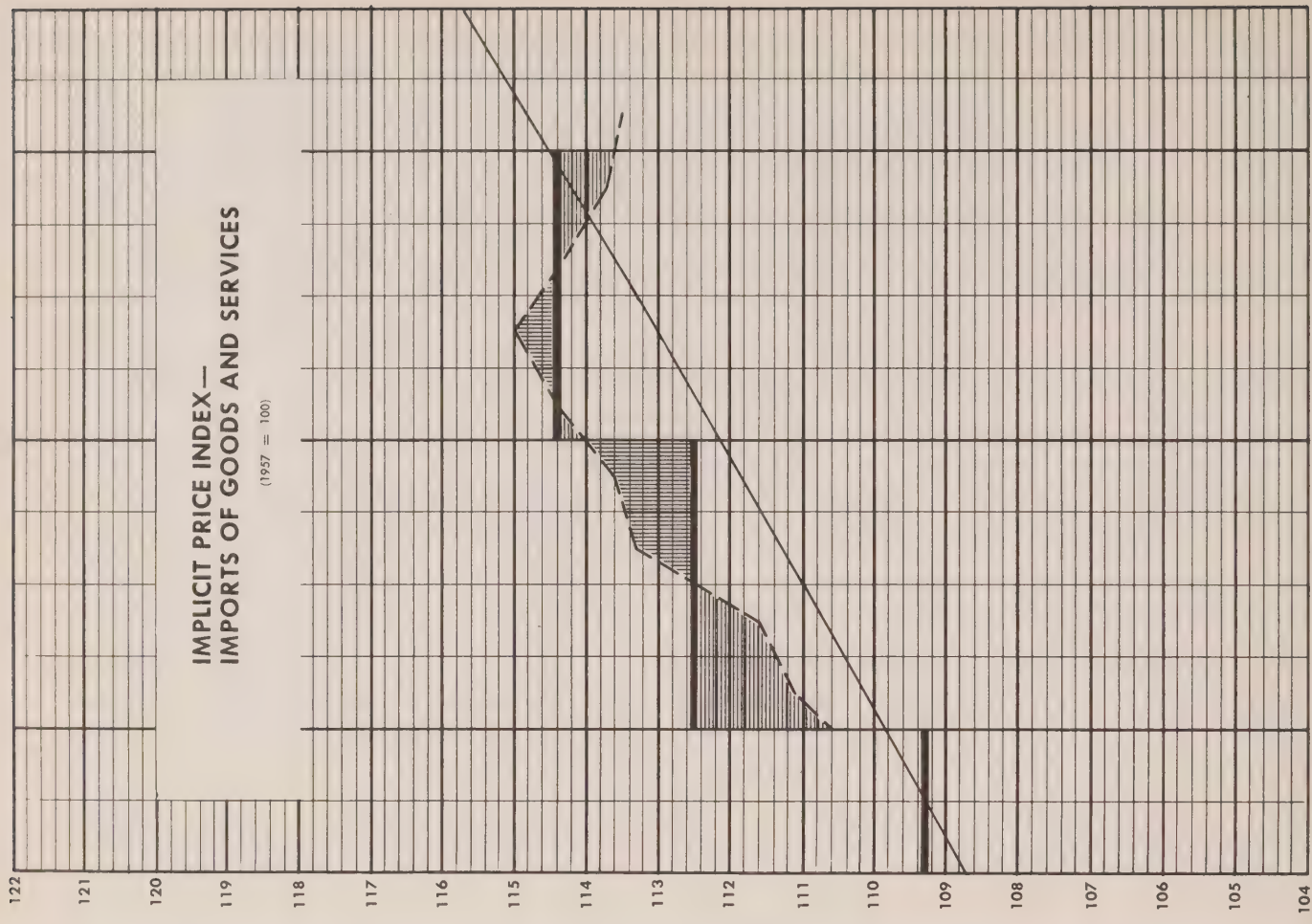


Annual Index — — — Quarterly Index

XII

IMPLICIT PRICE INDEX —
IMPORTS OF GOODS AND SERVICES

(1957 = 100)



Annual Index — — — Quarterly Index

(* Figures for Canada)

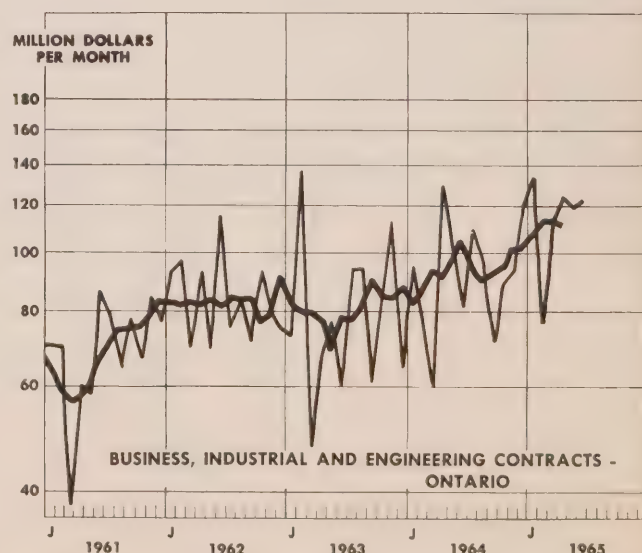
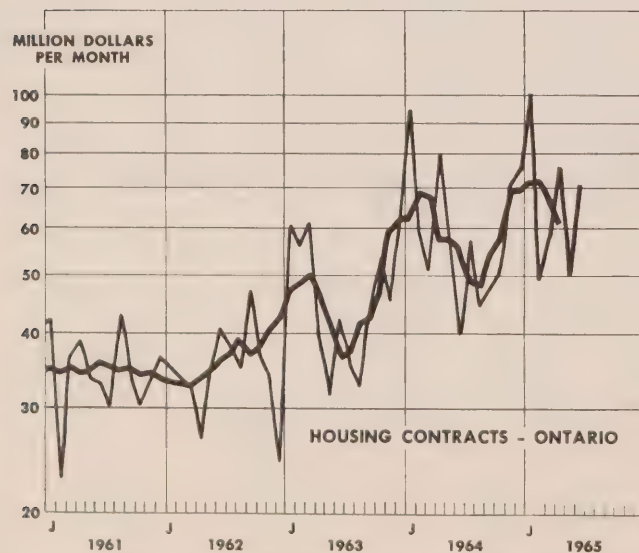
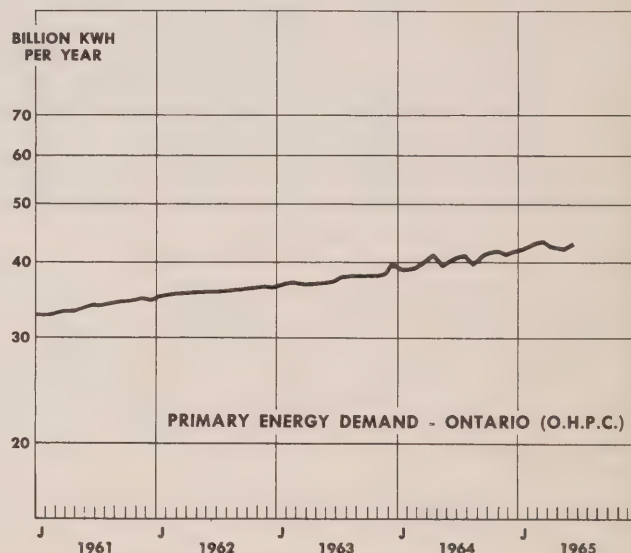
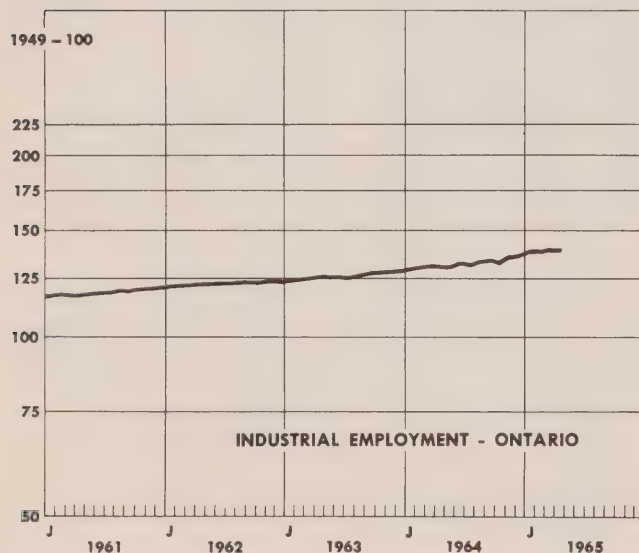
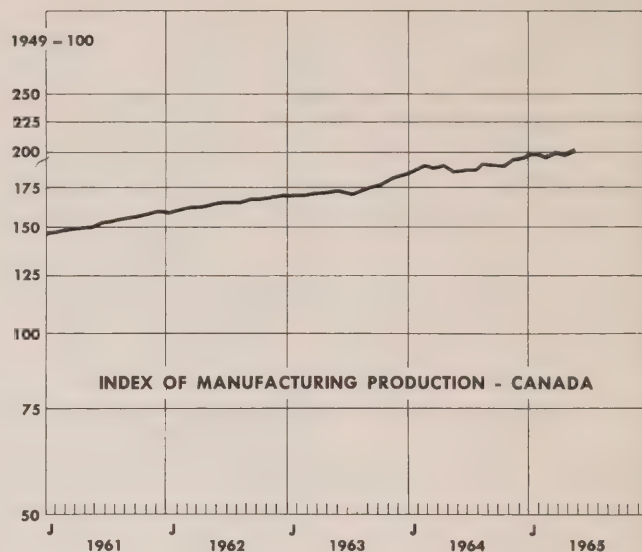
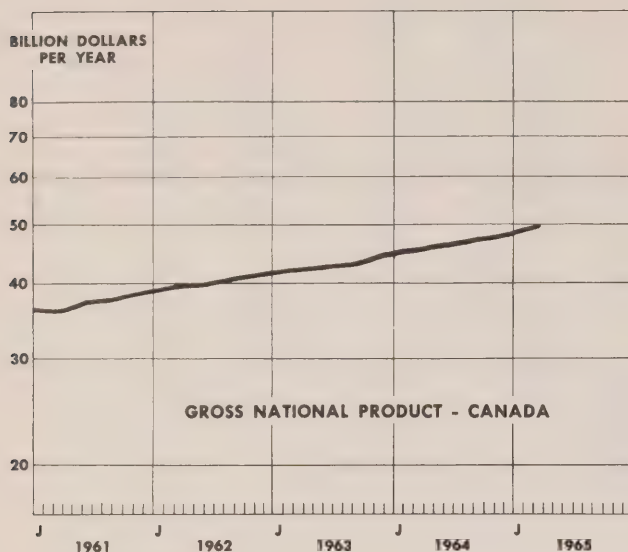
	May	June	July	August	September	October	November	December	January	February	March	April	May	June
1964-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
									1965-					

COINCIDENTAL AND LAGGING INDICATORS

ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED

(1) Revised figure

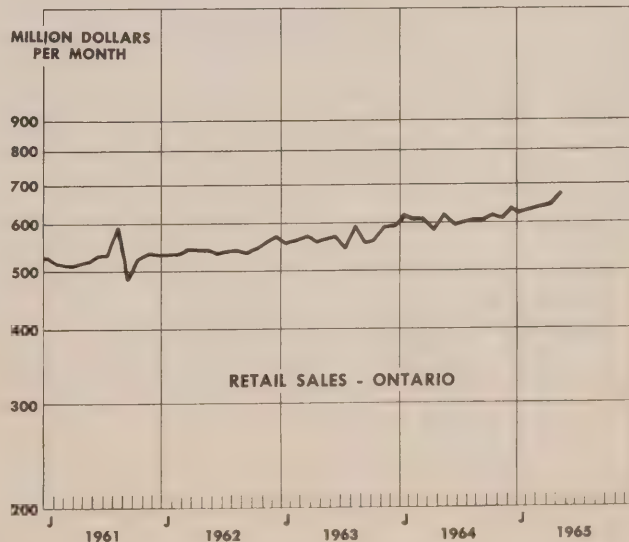
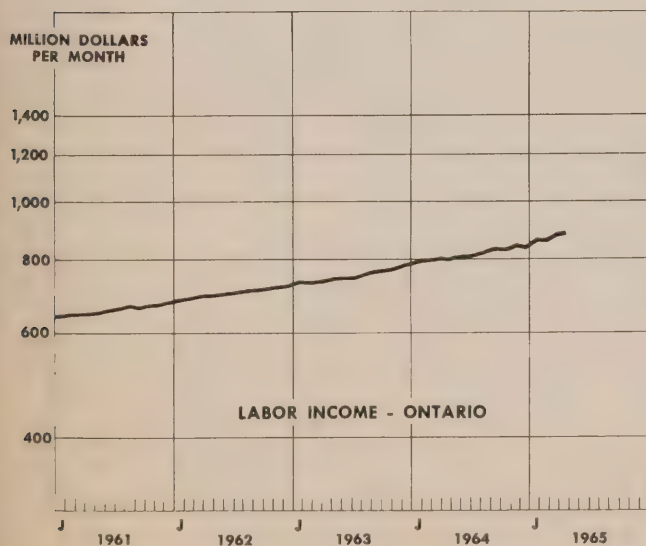
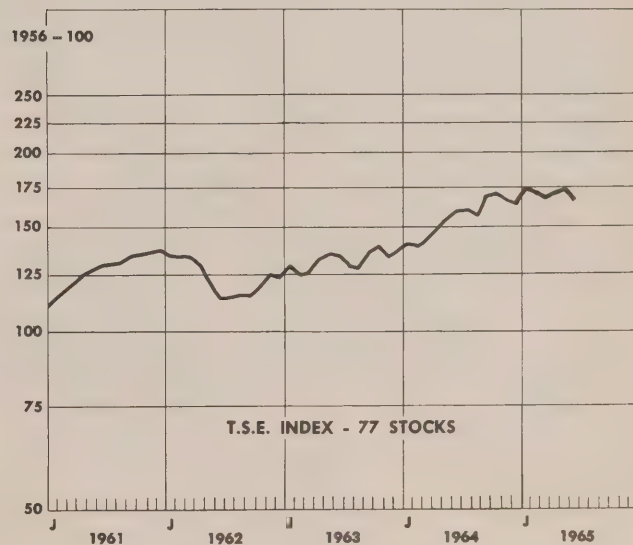
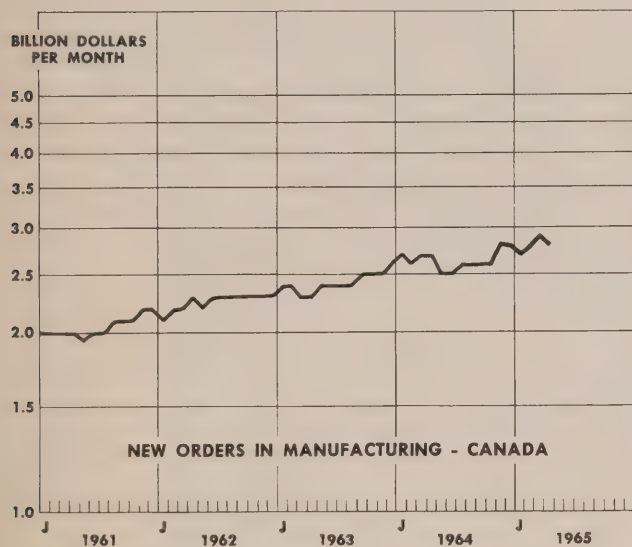
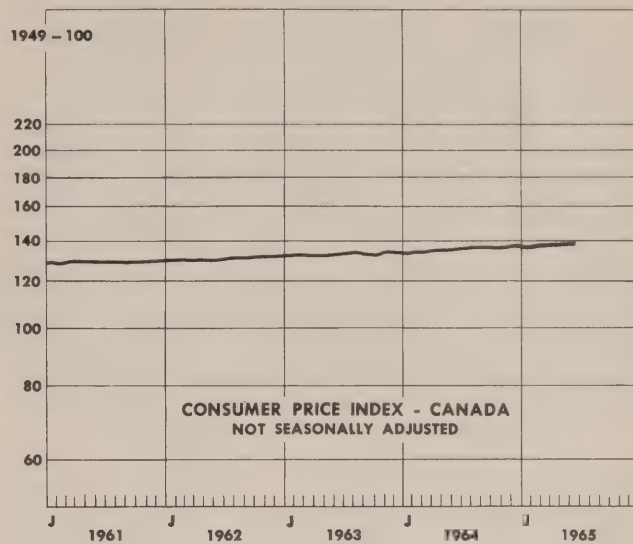
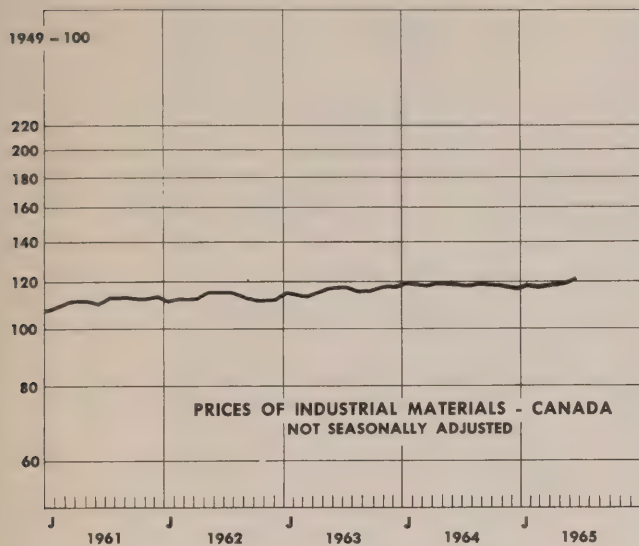
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



— TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

CONTENTS

The Ontario Economy	1
Canada's Present Industrial Cycle in Perspective	2
ARDA in Ontario	4
The Background of Federal Unconditional Grants to the Provinces 1867-1887, <i>Douglas A. Auld</i>	6
Indicator and Charts	13

THE ONTARIO ECONOMY

Construction

The value of housing contracts, seasonally adjusted, rose slightly in July to \$71.8 million, a level almost 25% higher than that of July 1964. On the other hand, the seasonally-adjusted value of Business, Industrial and Engineering contracts, after remaining somewhat steady during May and June, soared to a record \$144.5 million in July. This represents an increase of 18.2% over June and of 31.8% over July 1964. To allay the pressures in the construction industry arising from the current expansion as well as the anticipated construction for Expo '67, the Federal Government postponed several public projects which were to have been initiated shortly. By so doing the Federal Government hopes to ease the mounting problem of manpower and material shortages. The deadlines on shared-cost programs were extended to enable provincial and municipal governments to delay construction without losing the Federal contributions. At the same time the hope was expressed that the business community would also co-operate by delaying large projects until conditions were eased.

New dwelling unit starts, seasonally adjusted, rose by 378 to 5,496 in June, the highest level since February of this year. The figure for new dwelling unit completions continued to decline in June to 3,722, seasonally adjusted, falling considerably below the July 1964 figure of 4,876.

Water and Sewage Financing

The entry of the Ontario Government into the field of water and sewage financing was marked with the recent announcement that the Province will finance a 20-year \$67.1 million water and sewage scheme in five urban areas of Peel County. Involving an expenditure of \$38.7 million (or 57.7% of the total) for water works and \$28.4 million for sewage treatment works, the plan calls for the assumption of responsi-

bility for water and sewage facilities by the Ontario Water Resources Commission. New facilities will be built or existing facilities will be taken over, enlarged and operated by the Commission. Municipalities will purchase the water and sewage facilities on a use basis.

The specific areas involved in the regional servicing program are Toronto Township, Port Credit, Streetsville, Brampton, Chinguacousy Township and part of Oakville. Initially a major watermain will bring Lake Ontario water to Brampton and Chinguacousy Township, two areas which currently draw water from wells. Sewage treatment and water purification plants on Lake Ontario in Toronto Township will be enlarged, while package treatment plants on the Etobicoke Creek and the Credit River will eventually be abandoned. The focal point of the proposed water works system will be the Toronto Township filtration plant, which it is expected will eventually increase its production capacity from 12 million gallons to 60 million gallons of water a day. Plans also call for the enlargement of Toronto Township sewage plants at Lakeview and Clarkson as well as the Brampton-Chinguacousy Township plant on the Etobicoke Creek.

It is anticipated that the population of the area served by this plan will increase from its current 130,000 to 450,000 by 1985.

Foreign Trade

The latest foreign trade statistics available indicate that Canadian domestic exports in May were valued at \$745.7 million, up 11.2% over the May 1964 figure. Over the January-May period, when exports totalled \$3,184.2 million, the increase over 1964 was a less impressive 4.1%. This slower growth reflects the sharp decline of exports in the first few months of this year as compared with the same period in 1964 when wheat shipments to the U.S.S.R. were significant. Nevertheless, Canadian exports to most

of its usual customers have grown, notable exceptions being Japan and Germany, as well as the U.S.S.R. Exports to the United States in the January-May period, at \$1,834 million, are up 12.3% over that period in 1964. Exports to Belgium and Luxembourg are up a noteworthy 76.2% as well.

An indication of the excellent progress that Ontario manufacturing is making comes from the impressive growth in exports of inedible end products, up 18.5% over the same five month period last year. In the forefront of this growth is the automobile industry, where exports of automobiles, chassis, engines and parts have doubled during that time.

Preliminary data on Canadian imports in May indicate that at \$735.1 million, there has been an increase in imports of 11.8% over last May. The January to May comparison shows a smaller increase of 8.7%, with total imports at \$3,276.8 million. An analysis by country reveals that imports from the United Kingdom for the May and January-May periods fell 8.1% and 0.7% respectively, while those from the United States rose 15.9% and 10.4% to levels of \$506.8 million and \$2,359.6 million respectively.

Finance

The emerging international trend towards higher interest rates and such domestic disruptions as the recent mail strike, combined to have an unsettling effect upon the Canadian money market during July. The demand for loanable funds was generally erratic and the supply situation somewhat spasmodic. Reflecting this situation the day-to-day loan rate, which was quoted as low as $3\frac{1}{8}\%$ early in the month, fluctuated widely to close the month at around 4%. Direct dealer borrowing from the Bank of Canada was significant, particularly towards the close of July. Prime finance paper rates generally increased by $\frac{1}{8}$ to $\frac{1}{4}$ of 1%.

Selling pressures continued to prevail in most sections of the Canadian bond markets throughout July. On light trading volume, downward price adjustments of almost two full points were registered by certain longer termed maturities. The impending federal refunding requirements in respect of a maturing \$450 million Government of Canada debt obligation were cited as accounting largely for the light trading volume. The market's easier tone was attributed to fears of tighter credit conditions in the immediate future.

New Canadian bond financings for the first seven months of 1965 totalled \$2.35 billion, an increase of some 19.3% over last year's comparable total of \$1.97 billion. Of 1965's total new financings, U.S. pay issues amounted to \$363 million — an increase of almost 40 per cent over the same period of 1964.

Despite a significant resurgence of demand in the last three trading sessions of the month, prices of industrial equities on the Canadian stock exchanges closed the month at slightly lower levels. The Toronto Stock Exchange Industrial Index, in reflecting the market's trading pattern, declined to a closing low of 156.62 on July 26th before recovering to close the month at a level of 161.38 — a decline, nevertheless, of 1.89 on Index over the month.

Canada's official holdings of gold and U.S. dollars rose in July to \$2,491.5 million from \$2,480.1 million at the end of June. With the exception of April of this year, this is the first month to month increase registered by these reserves since their all time high of \$2,743.4 million set last November.

The value of the Canadian dollar appreciated in terms of U.S. funds late in July to more than offset the losses it incurred earlier in the month. The quoted value at the close of that month was 92.50 cents — a gain of 0.22 cents over the period.

CANADA'S PRESENT INDUSTRIAL CYCLE IN PERSPECTIVE

The present cycle in industrial production⁽¹⁾ began in January 1960 when the previous cycle reached a new peak. The recession reached a trough in January 1961, and recovery was achieved in June 1961. Since the recovery (for the past 47 months), industrial production has been expanding, and the latest

data available show that in May of this year output had reached a level 31.3 per cent above the previous peak.

The following table shows how the present cycle thus far compares with those of the past in terms of the duration of its various phases.

⁽¹⁾ The index of industrial production comprises mining, manufacturing and the electric power and gas utilities.

TABLE I
MONTHS DURATION OF CYCLICAL PHASES IN INDUSTRIAL PRODUCTION SINCE 1919

Cycle	Recession		Peak to Recovery	Expansion		Expansion as % of Total Cycle
	Peak to Trough	Trough to Recovery		Recovery to New Peak	Total Cycle Peak to Peak	
1919-1924	18	14	32	20	52	38.5
1924-1929	5	13	18	43	61	70.5
1929-1937	46	46	92	9	101	8.9
1937-1944	13	8	21	55	76	72.4
1944-1953	25	42	67	47	114	41.2
1953-1957	10	8	18	26	46	59.1
1957-1960	9	13	22	12	34	35.3
Average Cycle	18	21	39	30	69	43.5
1960 to date (May 1965)	12	5	17	47	64	73.4

The first point to note regarding Table I is that not only does the current cycle compare favourably with the average of past cycles, but also that it has already established three records: the number of months required to reach recovery (five) was the shortest on record; the number of months from previous peak to recovery (seventeen) was the shortest on record; and the number of months in expansion has already amounted to a record of more than 73 per cent of the total cycle so far. Furthermore, the expansion thus far has already been the second-longest, and has lasted four times as long as in the preceding cycle.

The second point to note is that there have been alternations in the durations of the trough to recovery

and peak to recovery, and in the expansion percentage of total cycle.

Table II shows how the present cycle (thus far) compares with those of the past in terms of compound annual percentage rates of change through the various cyclical phases.

Table II indicates that in the present cycle the rate of decline from peak to trough (at -4.1 per cent *per annum*) was one of the most moderate on record, and the rate of recovery from the trough (at 12.4 per cent *per annum*) was the fastest of any since the second world war. On the other hand, the rate of expansion (at 5.9 per cent *per annum*) has been the slowest on record; and the growth rate for the entire cycle thus far (at 4.3 per cent *per annum*) has been the slowest of the fast cycles.

TABLE II
COMPOUND ANNUAL PERCENTAGE RATES OF CHANGE
THROUGH THE CYCLICAL PHASES

Cycle	Recession		Expansion Recovery to New Peak	Growth Rate Peak to Peak
	Peak to Trough	Trough to Recovery		
1919-1924	-17.9	34.5	9.8	1.7
1924-1929	-9.7	19.5	10.6	8.1
1929-1937	-10.7	18.6	13.7	1.2
1937-1944	-7.3	13.0	13.6	9.7
1944-1953	-11.8	6.1	6.8	2.8
1953-1957	-4.1	9.1	8.3	5.5
1957-1960	-8.8	7.2	7.1	2.7
1960 to date (May 1965)	-4.1	12.4	5.9	4.3

Two columns in Table II reveal alternations in rates of change: peak to trough, and growth rate.

Combining Table I and Table II we find two major features. The first is the sequential pattern of alternate fast and slow cycles, with the present cycle taking its place as a fast one (although slower than previous fast cycles). The second feature is that fluctuations are being ironed out in the decline and expansion phases of cycles and in the alternations between fast and slow cycles, and that recessions

have been tending to become shorter and shallower.

It is obvious that the eighteen years since the second world war have been an improvement on the similar span following the first world war. Table III shows that growth was faster in the initial decade following the first world war (1919-1929) than in the immediate decade following the second (1946-1956), but regarding the succeeding eight-year periods we have done much better than a generation ago.

TABLE III
COMPOUND ANNUAL RATES OF TREND⁽¹⁾ FOR
CANADA'S VOLUME OF INDUSTRIAL PRODUCTION

<i>Post World War One</i>		<i>Post World War Two</i>	
<i>Period</i>	<i>%</i>	<i>Period</i>	<i>%</i>
1919-1929	6.7	1946-1956	5.9
1929-1937	3.0	1956-1964	4.1
1919-1937	3.1	1946-1964	5.0

⁽¹⁾ Trend calculated by least squares of logarithms.

ARDA IN ONTARIO

The Agricultural Rehabilitation and Development Act (ARDA), passed in June 1961, is an act empowering the Government of Canada to enter into agreements with individual provincial governments for the purpose of jointly studying rural and agricultural problems and undertaking appropriate remedial measures. Since 1961 there have been two agreements reached between the Government of Canada and the Government of the Province of Ontario, both outlining the specific operating policies, objectives and terms of ARDA.

The most recent Federal-Provincial Rural Development Agreement came into effect April 1, 1965, following the expiry of the original General Agreement, and is operative until 1970. While there are many basic similarities, the new Agreement differs from the original one in both emphasis and the amount of the Federal contribution. The shift in emphasis is from general resource development to the development of low income rural areas. The Federal Government contribution was increased from a maximum of \$50 million to a maximum of \$125 million.

Specifically, the Agreement recognizes that (a) adjustments on the part of rural areas and people are required in response to widespread social, technological and economic changes; (b) the economic level and standard of living of many people in rural areas are unreasonably low; (c) economic and social disadvantages affecting many low income rural people require government action; (d) there is a need in Canada for a more effective use of some lands; for soil conservation and improvement, and for management, conservation and development of water resources. Responsibilities under the Agreement are to be those of studying the changing needs of rural people and areas, and of setting up appropriate programs and projects to fulfill those needs.

Essentially, the Government of Canada, represented by the Minister of the Department of Forestry, undertakes to contribute one-half of the sharable cost⁽¹⁾ of approved programs or projects under ARDA, but limits maximum annual expendi-

⁽¹⁾ The actual percentage of the total cost borne by the Federal Government varies according to the manipulation of the shareable cost.

ture on all provinces to \$25 million in any one year. It agrees to pay the Province of Ontario, represented by the Minister of the Ontario Department of Agriculture, an amount up to \$5,058,287 *per annum* for the next five years.⁽²⁾

Responsibility for initiating programs and carrying them out rest mainly with the provincial government. Program proposals are studied by Ontario's ARDA Directorate, made up of representatives of certain provincial departments and the University of Guelph. Once accepted by the Directorate, and subject to the approval of the Ontario Treasury Board, projects are submitted for the approval of the Government of Canada. Local municipal participation is worked out between the provincial and municipal bodies.

The Agreement outlines the broad categories of activity that may be required in ARDA programs and projects.

- (a) *Research.* This category enables Canada and Ontario to undertake jointly physical, social and economic research.
- (b) *Land Use and Farm Adjustment.* Viable farms may be established through the enlargement, consolidation, regrouping and basic improvement of sub-marginal farms, and unsuitable farming areas may be withdrawn from use.
- (c) *Rehabilitation.* Rural people who by virtue of underemployment or low income are in need of assistance may be rehabilitated and re-established in effective employment.
- (d) *Rural Development Staff and Training Services.* This category provides for the training of staff needed to implement ARDA projects.
- (e) *Rural Development Areas.* Rural areas and communities may be designated and programs carried out where there is a need to increase income and employment opportunities.
- (f) *Special Rural Development Areas.* Comprehensive rural development programs may be carried out in specially selected rural development areas.
- (g) *Public Information Services.* This provides for the development of public information services suited to the needs of the ARDA program.

⁽²⁾ The actual allotment to Ontario each year is made up of a statutory grant plus an additional amount based on (i) its rural population, (ii) the number of rural non-farm families with family income of less than \$3,000 *per annum*, and (iii) the number of farms (excluding residential and institutional) with a total capital value of less than \$25,000 and annual farm product sales of less than \$3,750. In addition the Province can receive contributions from the \$50 million Special Fund for Rural Economic Development, a fund set up to assist specific major development projects.

- (h) *Soil and Water Conservation.* Measures may be taken to advance soil and water conservation in rural Canada primarily for agricultural and rural development purposes.

Activity under ARDA in Ontario has been restricted mainly to four categories: Research, Land Use and Farm Adjustment, Rural Development Areas, and Soil and Water Conservation. At present the total commitment of the three levels of government – federal, provincial and municipal – is about \$7 million.

The research under way at mid-1965 covers a wide range of studies. The Ontario Water Resources Commission is studying water resources in the Big Creek Watershed, and at the same time carrying out a survey of the hydrology of Ontario's streams and rivers, in order to allocate water more effectively. The adjustment problems in certain low income rural areas are also being studied under ARDA. Several studies are under way in the Canada Land Inventory, a national program to classify and map physical qualities in settled regions of Canada. The University of Guelph is involved in several studies under ARDA. One is the determination of the productive potential of roughland for pasture, with test plots located in Bruce, Dufferin, Grey, Northumberland, Simcoe and Victoria Counties. Another involves improving cultural practices for blueberry and cranberry production in Northern and Central Ontario. A study of land use in Bruce, Grey and Leeds Counties was recently completed.

Under the Land Use and Farm Adjustment category there are several programs and projects. Community pastures, land set aside to permit farmers to increase their livestock carrying capacities, have been established in certain areas of Victoria, Leeds and Stormont Counties, as well as in the Districts of Timiskaming and Manitoulin. A program of land consolidation for beef livestock ranching has been set up in Northeastern Ontario. A program to retire sub-marginal agricultural land into uses such as forestry, recreation and wildlife is in progress in many areas, particularly the Georgian Bay area and in Southeastern Ontario.

Some Soil and Water Conservation programs are the Whiteman Creek Watershed Development in Brant and Oxford Counties; Snake and Muskrat Rivers Watershed Development in Renfrew County; the Moira Rural Water Supply Development in Hastings County; and the Wetland Development in the Otonabee River Watershed. Other activities under this category include an engineering study on the South Nation River, assistance to the Rainy

River area which is experiencing drainage problems, and a water conservation and engineering project in Renfrew and Ontario Counties.

A Rural Development Study is in progress in Eastern Ontario, attempting to assess the physical capabilities of the land to meet the expected requirements of the people of the region. Another undertaking, the Burlington Rural-Urban Study, is being conducted to reconcile the use of nearby agricultural land with the municipality's need for commercial,

residential and industrial land. Finally, the District of Manitoulin having been declared a Rural Development Area under the terms of the Federal-Provincial ARDA Agreement, preparations are underway for the development of programs to improve the economy of the area. The particular approach used, that of having a rural development officer coordinate the facilities of several government departments, is intended to act as a pilot study. Its success will likely ensure its application to other areas as well.

THE BACKGROUND OF FEDERAL UNCONDITIONAL GRANTS TO THE PROVINCES 1867–1887

DOUGLAS A. AULD

Economist, Financial Research Branch (Summer 1965)

ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

The twenty year period from Confederation to 1887 can be pictured as the embryonic stage in the development of Dominion-Provincial financial relations. It was during this short span of years that Canada grew from a country of four provinces and three million people to one which extended from the Atlantic to the Pacific Ocean, encompassing over two million square miles and five million people. The backbone of Dominion-Provincial finances in 1867 was the federal subsidies to the provinces. The following is a brief glance at the initial structure of these grants and the unforeseen alterations which ensued.

Basic to the comprehension of the initial structure of federal subsidies is an understanding of the political philosophy behind the federation itself. Suffice it to say that if the federal government was to assume

any power, it was imperative that, at this level of government, there must be absolute control of tariffs and customs duties, the primary source of "provincial" revenue at that time.⁽¹⁾ Although the federal government was to shoulder the burden of provincial debt and assume administration of certain areas indigenous to the provinces up to 1867, the provinces would still have expenditures to meet, which the remaining revenue sources could not finance.

There were basically three solutions to this problem. First, the provinces could be permitted to retain some areas of indirect taxation. Second, the provincial legislatures could enact direct taxation to meet provincial expenditures. Third, the federal government could return a portion of the collected funds to each province. The first idea would clearly limit the effectiveness of the federal government's commercial policy, and this was recognized in the B.N.A. Act which forbade the employment of indirect taxation by the provinces.⁽²⁾ The second suggestion was literally unheard of and would not be accepted as an orthodox means of obtaining revenue. The third plan or proposal, in spite of the misgivings it engendered and after much adjustment, was finally — though somewhat reluctantly — agreed upon.

⁽¹⁾ *Customs Duties of Provinces — 1866*

	(\$'000)	% of Province's Total Revenue
Upper and Lower Canada	7,328	60
Nova Scotia	1,226	80
New Brunswick	1,037	78
Prince Edward Island	166	75
British Columbia	345	65
Total	10,102	64

⁽²⁾ B.N.A. Act, Section 92 (2).

Per Capita Grants

There appears to be a conflict regarding the method employed to determine the amount of the grant. Certain records indicate that the *per capita* grant for each province was to be the same as the *per capita* grant for Upper and Lower Canada, the latter being determined on the basis of the total subsidy required to finance their operations. Another maintains that it was the same as Nova Scotia's *per capita* grant, based on that province's proposed deficit of \$371,000.⁽³³⁾ Regardless of the method, the grant was established at \$.80 *per capita* and based on 1861 census figures. For each of the Maritime provinces the absolute value of the grant was to increase until its population reached 400,000. Under these terms Ontario received \$1,116,000, Quebec \$890,000, Nova Scotia, \$264,000 and New Brunswick \$202,000 in *per capita* grants.

Three years following the B.N.A. Act, Manitoba became a member of the Confederation. At that time, the province had no permanent government and hence no budget by which to judge its needs in the present and near future. The newest arrival received the \$.80 *per capita* grant based upon an inflated population figure of 17,000.⁽³⁴⁾ This and other grants would increase subject to the same conditions granted the Maritimes. Manitoba was quite willing to accept these terms and the Dominion was equally content in making the grants. In terms of its development relative to other provinces, Manitoba's entry into Confederation was premature.

The following year British Columbia was admitted as a province of the Dominion and also was accorded rather exceptional financial terms. The delegates were desirous of a *per capita* grant based upon a population of 120,000, computed by a special method.⁽³⁵⁾ At the completion of the deliberations, British Columbia was granted \$.80 *per capita* for a population figure of 60,000, when the actual number of settlers was approximately 9,100. This gave British Columbia a total grant of \$48,000 *per annum* which was to be augmented until the population reached 400,000.

Prince Edward Island rejected union in 1867. By 1873 this province was, like British Columbia, seek-

ing deliverance from an increasing *per capita* debt and high interest payments. After lengthy discussions, Prince Edward Island became the seventh member of Confederation, receiving an \$.80 *per capita* grant of \$75,000, under conditions identical to those of Nova Scotia and New Brunswick.

The initial *per capita* subsidies were as follows:

Province	Total Per Capita Subsidy
Ontario	\$1,116,000
Quebec	890,000
Nova Scotia	264,000
New Brunswick	202,000
Manitoba	13,600
British Columbia	48,000
Prince Edward Island	75,000
Total	\$2,608,600

Debt Allowance

The large debt incurred by the colonies in programs of road building and railway development was a major practical reason for Confederation. By 1866 debt charges of the colonies on a total net debt of \$96 million amounted to 27 per cent of all expenditures undertaken by the colonies. It was decided that, at Confederation, the federal government would assume the provincial debt under the following scheme. Each province would be granted a debt allowance on a *per capita* basis, as calculated by the 1861 census. By 1864 the prospective provinces' net indebtedness was as follows:

Province	Net Debt
Upper and Lower Canada	\$67,264,000
Nova Scotia	4,859,000
New Brunswick	5,703,000
Newfoundland	946,000
Prince Edward Island	241,000

On a *per capita* basis, there existed a discernible inequality among provinces. Nova Scotia and New Brunswick, however, had incurred other railroad liabilities which upon their surrender to the Dominion were added to the totals above, resulting in the following total and *per capita* debt:

Province	Total Debt	Population	Per Capita Debt
The Canadas	\$67,264,000	2,136,000	\$31.48
Nova Scotia	7,859,000	330,000	23.81
New Brunswick	7,003,000	252,000	28.58
Newfoundland	946,000	130,000	7.27
P.E.I.	241,000	85,000	2.83

⁽³³⁾ The reduction of Nova Scotia's proposed deficit from \$667,000 as a result of a budget revision changed the *per capita* deficit from \$1.70 to \$.94.

⁽³⁴⁾ Estimated settler population, 1,600 persons.

⁽³⁵⁾ The figure was arrived at by the following curious method. The *per capita* customs and excise levy in Canada was \$2.75, while the total for British Columbia was \$330,000. Based upon a *per capita* revenue figure of \$2.75, this would be equivalent to 120,000 persons in the province or a basic subsidy of \$96,000.

On the strength of these estimates it was decided that a debt allowance in the neighbourhood of \$25.00 *per capita* would be permitted. Since the federal government was to assume all the debt, it was evident that compensation was necessary with respect to the difference between the actual debt and debt allowance. If the actual debt exceeded the allowance, the province was to pay the Dominion an annual sum equal to five per cent of the difference. Similarly the Dominion would pay five per cent on the difference if the actual debt was less than the debt allowance. At the time of Confederation, the structure appeared settled and was to remain as stipulated, if and when the Dominion acquired new territory.

Province	Actual Debt	Debt Allowance	Deviation from \$25 Per Capita	Interest Payment To (—) or From (+) Federal Gov't.
	\$	\$	\$	\$
The Canadas	67,264,000	62,500,000	— .08	—238,200
N.S.	7,859,000	8,000,000	—1.83	+ 7,050
N.B.	7,003,000	7,000,000	+2.77	— 150

Manitoba's entry into the Dominion engaged the necessity of creating a debt allowance *pari passu* with the original provinces. Due to the estimated population of 17,000 and the absence of any debt, the interest payment by the Dominion on a \$27.77 *per capita* grant amount to \$23,600 *per annum*. British Columbia, upon attaining its status as a province of the Dominion in 1871, also received a debt allowance of \$27.77, applied to the inflated population figure of 60,000. Since the debt was assumed to be approximately one million dollars, the new province was entitled to an interest payment of \$33,000.

Prince Edward Island, suffering under a heavy debt, entered the federation in 1873. To alleviate this debt, a change in debt allowance policy for that province was introduced, giving it substantially more than the original \$25.00 *per capita* grant. Based upon a population of 93,750, Prince Edward Island received a debt allowance of \$50.00 *per capita*, thereby abrogating its debt of over 3.8 million dollars and creating a credit interest payment of approximately \$43,000.

Grants for Government Operation

The grants which were conferred upon the provinces for the operation of government are summarized below:

Province	Year of Entry Into Confederation	Grant for Operation of Provincial Gov't.
Ontario	1867	\$80,000
Quebec	1867	70,000
New Brunswick	1867	50,000
Nova Scotia	1867	60,000
Manitoba	1870	30,000
British Columbia	1871	35,000
Prince Edward Island	1873	30,000

The *per capita* grants, debt allowances and interest payments, and the grants for government were conferred upon all those areas entering Confederation. There were, in addition, special grants which require some explanation.

Special Grants

In 1867 one special grant arrangement was made with New Brunswick — an annual grant of \$63,000 for ten years — as a method of alleviating the weak financial position of the province. (At the time of Confederation, New Brunswick was allocating 38% of its current revenue for interest payments, and was soon to face further demands.) A few years later, Manitoba received a special grant of \$45,000 *per annum* as payments for lands held by the Dominion.

British Columbia had originally requested a total subsidy and grant payment of \$216,000. As a result of the settlement of the three major federal transfers, British Columbia was to receive approximately \$116,000 each year, or \$100,000 short of its demand. The deficit was bridged by granting the new province \$100,000 each year, provided that the Dominion received a belt of land twenty miles on each side of the proposed Pacific railway. Both the amount of land and the payment for such were arbitrary, but it furnished a plausible subterfuge to the problem of complying with British Columbia's request.

Despite its deteriorating fiscal position, Prince Edward Island demanded rather generous financial terms if she became a part of the Dominion. An offer of \$800,000 was made by the Dominion, which would enable the province to purchase lands presently owned by absentee landlords. This first settlement was rejected. In May of 1873, the new terms granted an annual payment of \$45,000 which the Island could capitalize and from which it could draw out a sum not in excess of \$800,000. With interest at 5% *per annum*, this yielded a capitalized withdrawal fund of \$900,000 for Prince Edward Island. Concomitant with the other financial terms, the Island accepted this as a settlement for union.

TABLE I

TOTAL FEDERAL GRANTS AND SUBSIDIES TO PROVINCES
AT TIME OF ENTRY INTO CONFEDERATION

Province	Date of Entry	Interest Payment To (-) or From (+) Federal Gov't.	Per Capita Subsidy (\$80)	Grant for Government Operation	Special Grant	Total	Per Capita Total Grant and Subsidy
		\$	\$	\$	\$	\$	\$
Ontario	1867	-125,664 ⁽ⁱ⁾	1,116,000	80,000	—	1,070,336	.76
Quebec	1867	-112,336 ⁽ⁱ⁾	890,000	70,000	—	847,664	.76
Nova Scotia	1867	+ 7,050	264,000	60,000	—	331,050	1.00
New Brunswick	1867	— 150	202,000	50,000	63,000	314,850	1.25
Manitoba	1870	+ 23,600	13,600	30,000	—	67,200	3.95 ⁽ⁱⁱ⁾
British Columbia	1871	+ 33,000	48,000	35,000	100,000	216,000	3.60 ⁽ⁱⁱ⁾
P.E.I.	1873	+ 43,000	75,000	30,000	45,000	193,000	2.05
Total \$		-131,500	2,608,600	355,000	208,000	3,040,100	

(i) No accord could be reached in 1867 on how the debt could be divided. In 1870 it was decided that the proportions assumed by Ontario and Quebec were 52.8% and 47.2% respectively.

(ii) *Per Capita* grants for Manitoba and British Columbia in this table are based upon inflated population figures. The *per capita* grant based on actual population figures would have been considerably higher than those recorded above.

The initial subsidies and grants for each province upon entry into Confederation are tabulated as aggregates in Table I.

Post-Confederation Alterations

The first agitation for revision of the original grants came from Nova Scotia in 1869, two years following entry into the Dominion. Anti-Confederation feeling was intense and justified by Nova Scotians on the grounds that they had not received a fair financial agreement in 1867.

Nova Scotia's first grievance centered around the debt allowance. In relation to that of Ontario, Quebec and New Brunswick, the debt allowance was lower. Secondly, the average annual *per capita* customs revenue from Nova Scotia had been \$3.28 between 1864 and 1867, while in the Canadas it had been \$2.60 for the same period. It was subsequently argued that Nova Scotia assumed a greater burden of the Dominion's taxation. Thirdly, the province persisted in its claim that under the existing framework of Confederation, she had lost the sources of 90% of the revenue but the Dominion had assumed only 55% of the expenditures. The result was a deficit which present financial arrangements could not alleviate.

As a consequence of these protestations, an Act of Parliament raised Nova Scotia's debt allowance to \$27.77 *per capita*, the same level as that of New Brunswick, and granted a ten year subsidy of \$82,698 dating from 1867. This was the initial breach of the 1867 structure, a breach which was to widen dangerously in years to come.

Four years later New Brunswick placed its grievance before the Dominion, arguing that its contributions to the Dominion were out of proportion, considering the amount it received from the federal treasury. The forecasted deficit could not be met by direct taxation, since such a measure would not receive popular support. Recognizing that the Treaty of Washington had rescinded New Brunswick's right to collect lumber duties, the federal government granted an indemnity of \$100,000 *per annum*.

The year 1873 was marked by two events, the entry of Prince Edward Island into Confederation and the realignment of the debt allowances. The background for such a revision was the disparity between the debt allowance and actual debt of the Canadas. The division of the debt between Ontario and Quebec was never settled originally and was finally placed before an arbitration committee. The latter decided that the surplus debt should be divided in proportion to the benefits received from the total debt of Upper and Lower Canada. There-

fore, Ontario would finance 52.8% of the surplus debt and Quebec would finance the remainder. Quebec opposed this decision and the matter was introduced before the House of Commons, imploring the federal government to accept the excess debt of Quebec and Ontario. The suggestion, refused in 1871, was adopted in 1873, and the overall changes were as follows:

Province	Addition in Debt Allowance in 1873
Upper and Lower Canada	\$10,506,100
Nova Scotia	1,544,300
New Brunswick	1,176,700
British Columbia	280,100
Manitoba	79,400
Total	\$13,586,600

For the next eleven years, an array of minor concessions and alterations took place. In 1876 Manitoba's *per capita* grant increased by \$26,700, based on a forecasted population growth. Two years later, the *per capita* grant was declared on the basis of a population of 150,000 and the grant for government was increased by \$20,000. During this period the special grants to Nova Scotia and New Brunswick expired and were not renewed.

By 1884 agitation from Quebec and disharmony among members of the federal cabinet forced the Dominion to reconsider the structure of debt allowances, and, with some regret, institute the second major revision. In 1873 the Dominion had assumed the debt of Ontario and Quebec and the next step taken was in addition to this. The interest charged on the earlier excess debt was added to the 1873 alterations in debt structure. This added debt allowance of \$5,397,500 was to be divided in the same ratio as decided upon by the arbitrators thirteen years previous. Compensation was granted to the other provinces, resulting in additions to all debt allowances and interest payments.

Province	Addition to Debt Allowance in 1884 ⁽ⁱ⁾
Ontario	\$2,848,300
Quebec	2,549,200
Nova Scotia	783,400
New Brunswick	604,500
Manitoba	110,800
British Columbia	83,100
Prince Edward Island	183,000
Total	\$7,162,300

(i) Interest on the excess debt, payable by the Dominion, was now \$358,614.

TABLE II
DOMINION-PROVINCIAL SUBSIDY AND GRANT ARRANGEMENTS AND ALTERATIONS 1867-1887
(Thousands of dollars)

	1867	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	Per Cent In- crease 1867- 1887
Ontario																						
Per Capita	1,116.0						1,116.0											1,116.0			1,116.0	
Debt Interest	(125.6)																	142.0			142.0	
Government	80.0						80.0											80.0			80.0	
Special	—						—											—			—	
Total	1,070.4						1,196.0											1,338.0			1,338.0	25
Quebec																						
Per Capita	890.0						890.0											890.0			890.0	
Debt Interest	(112.3)						—											127.0			127.0	
Government	70.0						70.0											70.0			70.0	
Special	—						—											—			—	
Total	847.7						960.0											1,087.0			1,087.0	28
Nova Scotia																						
Per Capita	264.0		264.0		276.0		276.0											300.0			300.0	
Debt Interest	7.0		64.7		64.7		141.7				276.0				300.0			181.2			181.2	
Government	60.0		60.0		60.0		60.0				141.7				141.7			60.0			60.0	
Special	82.7		82.7		82.7		82.7				—				—			—			—	
Total	413.7		471.4		483.4		560.4				477.7				501.7			541.2			541.2	31
New Brunswick																						
Per Capita	202.0				208.0		208.0				208.0				224.0			224.0			224.0	
Debt Interest	—				—		58.4				58.4				58.4			88.4			88.4	
Government	50.0				50.0		50.0				50.0				50.0			50.0			50.0	
Special	63.0				63.0		163.0				100.0				100.0			100.0			100.0	
Total	315.0				321.0		479.4				416.4				432.4			462.4			462.4	46
Manitoba																						
Per Capita				13.6			13.6			40.3			120.0					120.0			120.0	
Debt Interest				23.6			37.6			37.6			37.6					196.0			196.0	
Government				30.0			30.0			30.0			50.0					50.0			50.0	
Special				45.0			45.0			45.0			45.0					175.0			145.0	
Total				112.2			126.2			152.9			252.6					541.0			511.0	355
British Columbia																						
Per Capita				48.0			48.0								112.0			112.0			112.0	
Debt Interest				33.0			37.0								37.0			41.5			41.5	
Government				35.0			35.0								35.0			35.0			35.0	
Special				100.0			100.0								100.0			100.0			100.0	
Total				216.0			220.0								434.0			288.5			288.5	33
Prince Edward Island																						
Per Capita							75.0								76.0			76.0			76.0	
Debt Interest							43.0								43.0			52.1			52.1	
Government							30.0								30.0			43.0			43.0	
Special							45.0								45.0			45.0			65.0	
Total							193.0								194.0			216.1			236.1	25
TOTAL (Canada)	2,646.8	2,646.8	2,704.5	2,816.7	3,050.7	3,050.7	3,735.0	3,735.0	3,735.0	3,761.7	3,616.0	3,616.0	3,715.7	3,929.7	3,820.7	3,820.7	3,820.7	4,474.2	4,504.2	4,504.2	4,464.2	66

Note: Brackets indicate a payment to the federal government.

For the next three years considerable discontent was evident in the provinces regarding existing financial arrangements. This culminated in the Premiers' Conference in 1887. To alleviate these agitations, the Dominion forwarded certain additional subsidies to Manitoba and Prince Edward Island. The claims of Nova Scotia and Quebec, that their contributions to the federal government were greatly in excess of federal reimbursements, received little notice.

In 1884 Manitoba received an education grant of \$30,000 for which repayment was to be made (at five per cent interest) from the sale of school lands. After constant pressure from the provincial government of Manitoba, the federal government awarded an exceptional revision of that province's grants and subsidies. Up until this time the province had received \$45,000 *per annum* for lands held by the Dominion. Now Manitoba wanted full rights to these lands. As a "final settlement" the Dominion granted Manitoba \$100,000 *per annum* in lieu of provincial ownership of certain lands, a debt allowance based on 125,000 people, and a *per capita* grant at an increasing rate until population reached 400,000. Such a revision gave Manitoba the highest *per capita* federal grant in the Dominion, based on the current population figures of 1881.

The province of Prince Edward Island received a grant of \$20,000 *per annum*, commencing in 1887, as a compensation for railway subsidies which were awarded other provinces in 1882. Once more, special attention was granted to one province, although in this case the grant seems to have been an equitable one.

The growing demands upon provincial treasuries, accompanied by the *ad hoc* policy of the federal government toward disbursements, brought several of the provincial premiers together in 1887 to discuss changes and make recommendations to the federal government. Although the proposals were not accepted, it was the initial step toward the general revision carried out in 1907.

Table II shows the extensive piecemeal changes that occurred in the Dominion-Provincial subsidies and grants during the period 1867-1887. The purpose of this table is to illustrate the structural alterations and approximate financial effects.

In summary, it may be said that the supposedly fixed and final terms granted to each province upon its entry into Confederation soon gave way to a

series of concessions, compromises and alterations. Between 1867 and 1887, the federal government subsidies increased 66 per cent, one province receiving as much as a 355 per cent increase within fifteen years. The reason behind these alterations was both political and economic. In some respects Confederation was hastily conceived as a compromise between the demand for complete union of the colonies on the one hand, and the desire to protect regional interests on the other. Because of the ever-present sense of urgency and haste, some details were neglected or accorded only peripheral attention.

Except for population allowances in some provinces, the arrangements were a financial straight-jacket for both federal and provincial governments. There was little flexibility to account for an expanding Dominion and for variations in both population and provincial expenditure. As urbanization took place, the provinces were faced with layouts for education and transportation, especially where there existed little or no municipal organization. The newer provinces needed monies to initiate some development in order to attract people.

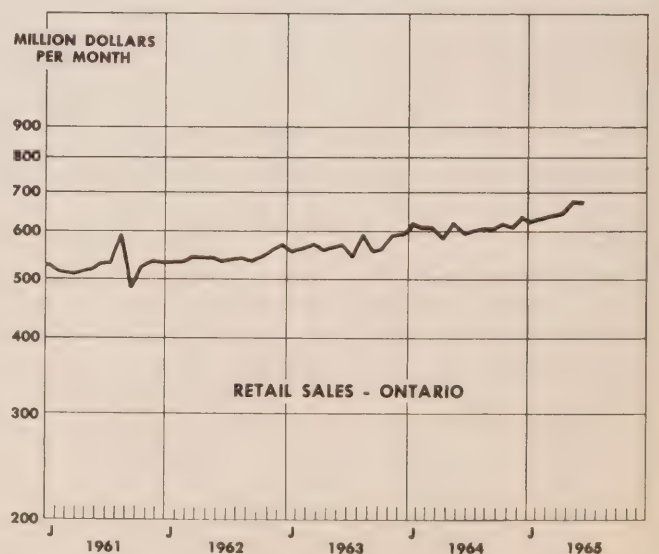
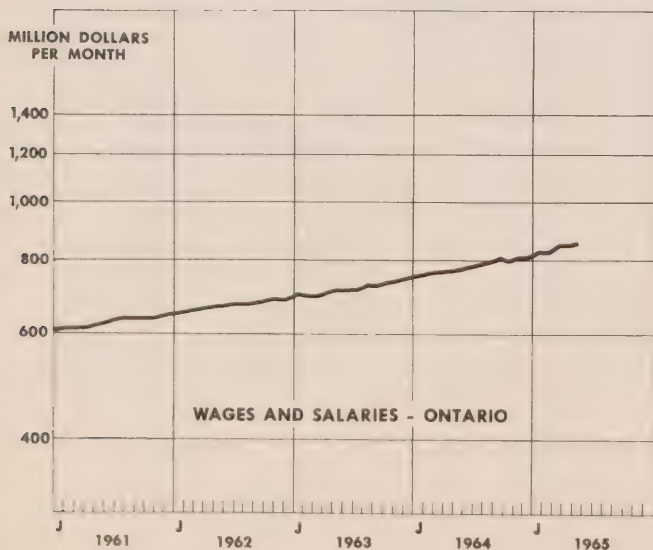
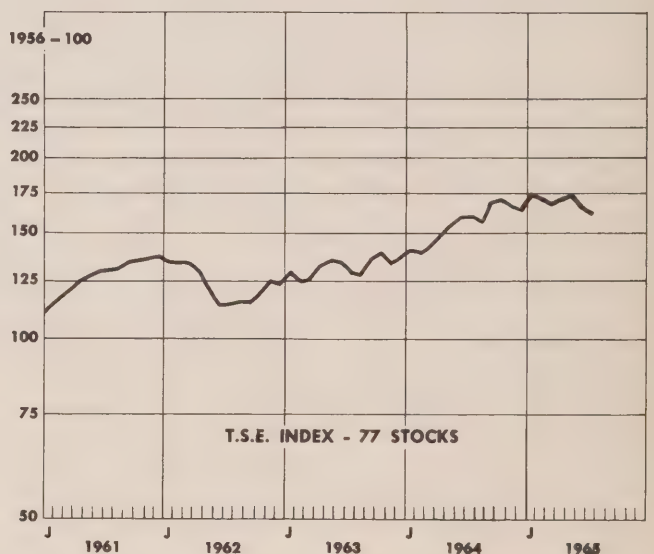
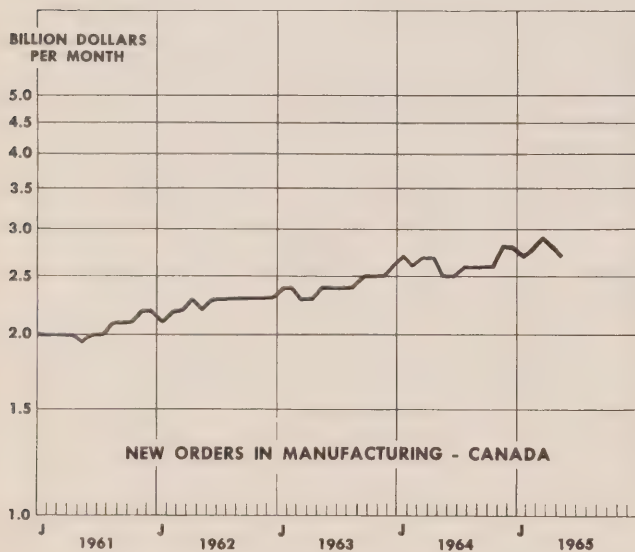
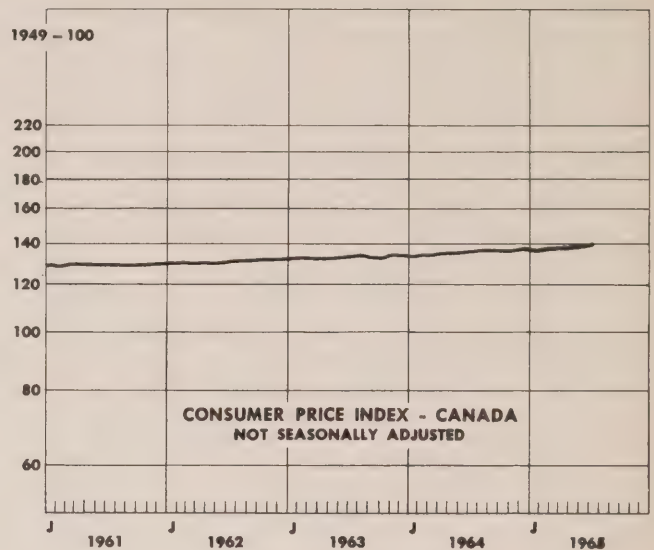
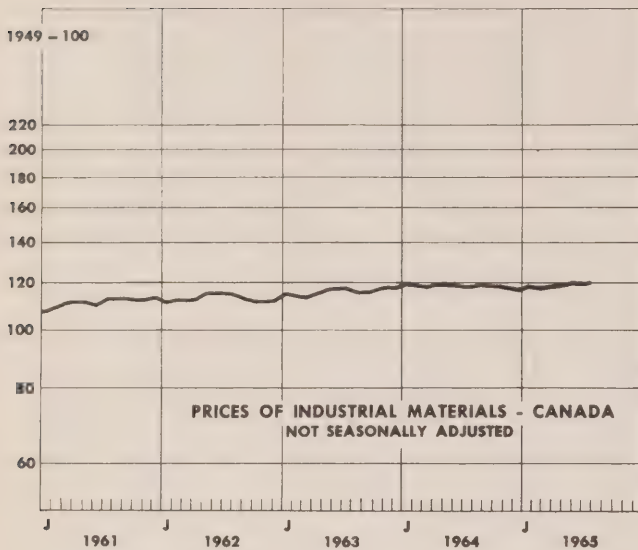
Invariably the demands of the provinces were met by the federal government, in many cases on the grounds that the support of the provinces was necessary for the continued existence of the Confederation. The claims of Nova Scotia in 1869 were granted as a rectification of an original mistake. The extra grant to British Columbia was a means of meeting the adamant demands of a new entrant into the federal fold. Manitoba received financial assistance far beyond its needs at the time of entry into Confederation. Norquay, the premier from 1878 to 1887, was a firm supporter of the Macdonald federal administration, and the increase in grants and subsidies can be partially explained in terms of this relationship. It is an interesting fact that most concessions were made immediately before or after federal elections, and that less than five went to governments whose party in power was opposite that of the Dominion.

In retrospect, it is difficult to find any other feasible alternative that could have been considered by the Confederation Fathers. The conference of 1887 is testimony to the fact that after twenty years, the provinces recognized that it was not possible to achieve the "full settlement of all future demands"⁽⁶⁾ within the original financial structure due to the rapidly changing political and economic environment.

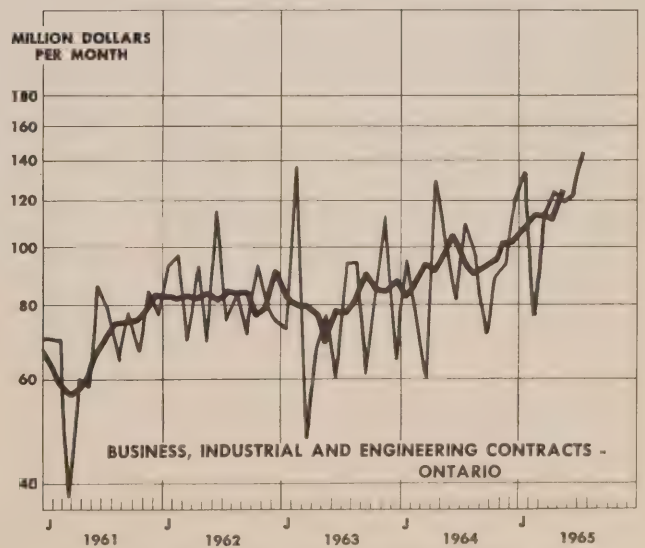
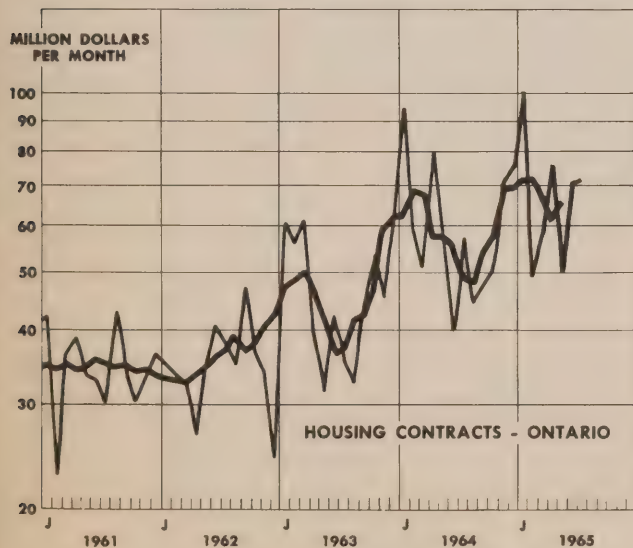
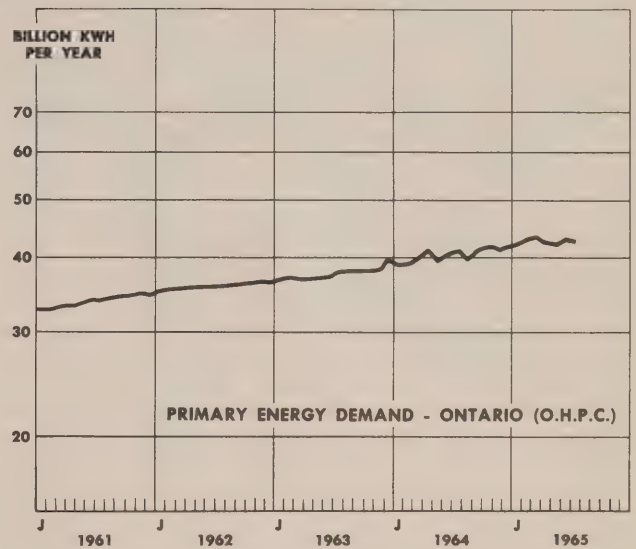
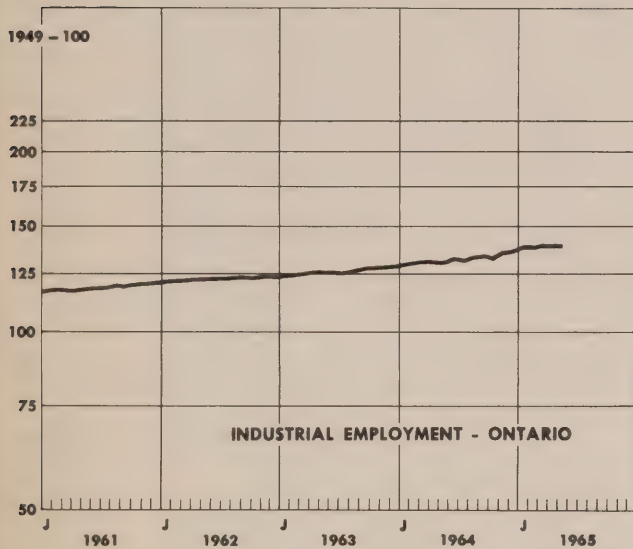
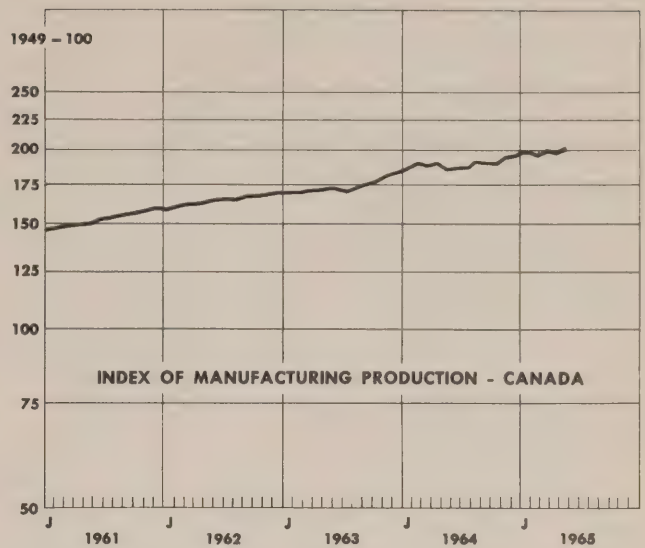
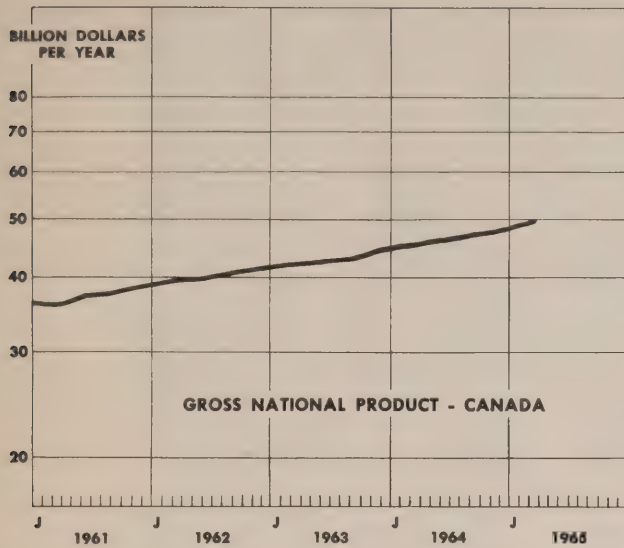
⁽⁶⁾ B.N.A. Act, Section 18.

1964											
-1965											
LEADING INDICATORS	June	July	August	September	October	November	December	January	February	March	April
Average Weekly Hours Worked in Manufacturing	41.1	40.8	41.1	41.3	41.1	40.8	41.3	41.1	40.4	41.6	41.5
New Dwelling Unit Starts	4,238	5,213	4,626	4,068	5,303	5,962	5,559	4,318	5,798	5,006	3,916
Business Failures	102	95	81	77	97	59	84	93	73	108	64
Business Failures - Liabilities	12.8	10.4	2.7	8.6	8.2	2.9	1.8	3.0	4.6	8.0	4.5
New Orders in Manufacturing*	2,549	2,554	2,591	2,615	2,619	2,735	2,750	2,677	2,792	2,865	2,818
Housing Contracts	40.1	57.6	44.9	47.7	51.3	71.7	75.7	100.3	49.2	58.7	76.2
Business, Industrial and Engineering Contracts	81.5	109.6	97.5	71.8	89.9	93.6	120.3	133.1	76.8	114.3	124.6
Money Supply*	17,176	17,346	17,448	17,517	17,391	17,502	17,610	17,855	18,047	18,271	18,575
T.S.E. Index - 77 Stocks	158.9	160.5	156.6	169.6	171.2	166.0	164.3	173.3	171.9	169.3	172.1
COINCIDENTAL AND LAGGING INDICATORS											
New Dwelling Unit Completions	3,095	4,876	3,798	4,519	4,160	2,969	3,013	2,817	4,330	9,696	7,218
Average Hourly Earnings in Manufacturing	2.13	2.13	2.16	2.17	2.15	2.14	2.16	2.19	2.19	2.22	2.23
Gross National Product*	46,684			47,392			48,016			49,676	
Cheques Cashed in Clearing Centres	3,749	3,602	3,620	3,891	3,789	3,600	3,688	3,708	4,058	4,113	4,118
Retail Trade	602	608	611	610	623	618	635	630	636	641	648
Labour Force	2,575	2,570	2,571	2,564	2,561	2,561	2,565	2,614	2,590	2,598	2,597
Employed	2,477	2,486	2,486	2,484	2,467	2,491	2,489	2,543	2,525	2,540	2,524
Unemployed	98	84	83	80	94	73	76	71	65	58	73
Unemployed as % of Labour Force	3.8	3.3	3.2	3.1	3.7	2.8	3.0	2.7	2.5	2.2	2.8
Wages and Salaries (i)	777	784	792	804	798	806	808	825	823	843	848
Industrial Employment	132.6	131.7	134.2	134.6	133.5	136.2	136.8	138.1	138.4	139.6	139.6
Total Industrial Production*	211.0	211.6	214.6	214.4	215.1	220.9	221.1	224.3	223.1	226.7	225.5
Total Manufacturing	185.3	186.7	190.8	190.2	189.1	194.5	194.4	197.2	195.9	199.4	198.2
Non-Durables	183.1	181.8	184.4	185.0	187.1	191.0	192.7	191.4	189.8	188.9	189.4
Durables	187.8	192.6	198.3	196.3	191.4	198.6	196.4	203.9	203.1	211.8	208.6
Mining	329.4	321.3	318.9	315.3	326.7	341.2	338.1	348.3	343.3	347.5	333.5
Electric Power & Gas Utilities	405.4	407.4	403.7	416.1	426.9	421.8	434.1	429.6	437.4	441.8	436.3
Primary Energy Demand (Annual Rate)	40.98	41.01	39.79	41.08	41.81	41.29	41.72	42.13	42.86	43.46	42.52
ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED											
Domestic Exports*	774.7	772.4	674.1	724.0	669.9	706.6	714.2	569.2	538.3	685.5	645.5
Imports for Consumption*	687.6	637.9	566.2	616.9	636.8	673.4	656.3	559.7	551.1	730.0	699.8
Foreign Exchange Reserves*	2,534	2,534	2,576	2,625	2,687	2,743	2,674	2,668	2,649	2,554	2,567
Prices, Industrial Materials*	257.8	257.3	259.9	258.8	258.0	258.5	256.2	256.7	255.3	256.3	256.6
1935-39=100											
US											
Wages and Salaries series replaces Labour Income series.											

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



ECONOMIC INDICATORS—SEASONALLY ADJUSTED



— TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

The Ontario Economic Review is prepared and edited monthly in the Economics Branch of the Department of Economics and Development and is available free of charge. The review is intended to provide current information on economic activity in Ontario and to act as a forum for the results of research in the public service on matters affecting the Ontario economy. The signed articles reflect the opinions of their authors and do not necessarily represent the views of the Economics Branch. All correspondence should be directed to the Editor, Ontario Economic Review, Economics Branch, Department of Economics and Development, 950 Yonge St., Toronto 5.

ONTARIO ECONOMIC REVIEW



DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

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CONTENTS

The Ontario Economy	1
The Area Development Program	5
A Progress Report on the <i>Economic Atlas of Ontario</i> , <i>Professor W. G. Dean</i>	7
Indicators and Charts	9

THE ONTARIO ECONOMY

The high level of employment in Ontario continued to reflect favourable conditions within the province. In August unemployment was at a near-record low of 2.6% of the labour force, seasonally adjusted. Also indicative of the continuing expansion in Ontario was the \$122.9 million value of larger construction contract awards in September.

Latest DBS figures reveal that in the second quarter of 1965 the Gross National Product was at an annual rate of \$50,948 million, up 1.8% over the first quarter rate. This marks the third successive quarter in which the economy has experienced a powerful sustained growth in final domestic demand. Statistics on the Canadian Balance of Payments, also available for the second quarter of 1965, reveal a slightly reduced but nevertheless still large deficit in the current account. The merchandise import balance which only developed in the last six months has accounted for much of this increased deficit.

Production

The seasonally adjusted Canadian Index of Industrial Production rose to a level of 226.1 in June (based on 1949=100), approaching the record level of 226.7 set in March of this year. This June figure represents an increase of 0.3% over May, and of 7.2% over the June 1964 level. Total manufacturing production — the major component of the Index — rose to 200.6 at the same time. This increase of 0.2% over the previous month was the end result of two opposing movements: the 1.2% increase of durable goods production to 211.1 and the 0.8% decline of non-durables to 191.6. Motor vehicles and iron castings were the important contributors to the growth of durable goods production, while the decline of non-durable goods was due mainly to declines in foods and beverages and rubber products. The mining index rose by 0.9% in June to a level of 336.0; significant here were the 4.5% increases in both gold

and coal production. Electric power and gas utilities moved up only fractionally from 433.0 in May to 433.5 in June.

Steel ingot production in August totalled 858.4 tons, up 12.9% from August 1964; the January-August figure of 6,557.3 tons was 10.4% higher than that of the comparable 1964 period. Pig iron production displayed a roughly similar pattern of growth, climbing 10.2% from August 1964 to a level of 634.0 tons in August 1965. However, the production increase from last year's January-August figure to this year's 4,683.5 tons was a smaller 6.4%.

The value of shipments in all manufacturing industries in Ontario rose to a record level in June. At \$1,530.8 million, the figure was more than 50% of the total Canadian figure, reflecting the high concentration of manufacturing in Ontario. Growth since last June has been about 10.4%.

Construction

Total building activity in Ontario during the nine month period January-September was up considerably, as reflected in the 24.4% increase in construction contract awards over the comparable 1964 period. At a value of \$1,671.2 million this represented 41.1% of the national value. However, the value of housing contracts awarded in Ontario during August, according to revised seasonally adjusted statistics, dipped to \$59.1 million, a decline of 22.4% from the July figure of \$76.2 million. Yet this does represent a 9.0% increase over the August 1964 value. In similar fashion the value of Business, Industrial and Engineering contracts awarded declined over the month by 10.0% to \$115.0 million seasonally adjusted, but still was 27.8% higher than the August 1964 figure of \$90.0 million.

In July construction began on 4,770 dwelling units (seasonally adjusted), down 17.8% from the near-record level of the previous month. New dwelling

unit completions that month were also down, in this case to a very low seasonally adjusted level of 2,153 — a drastic decline of over 46% from June.

The value of "big jobs" in Ontario — each valued at over \$1 million — was \$122.9 million in September, over 38% of the value of "big jobs" in all of Canada. Some of the more significant ones are listed below.

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ Million</i>	<i>Description</i>
Belleville	9.7	Hospital addition
Brampton	1.5	Court house
Etobicoke Twp.	4.6	Housing
Fergus	4.0	Plant
Kingston	1.1	School
Nepean Twp.	1.0	Office and plant addition
North York Twp.	8.0	Addition to home for the aged
North York Twp.	5.0	Office building extension
Oshawa	2.1	School
Ottawa	7.0	Shopping centre
Port Arthur	2.3	Hospital addition
St. Catharines	1.3	Apartments
Sarnia	25.0	Oil refinery units
Toronto	5.9	Rapid transit structures
Toronto (Metro)	4.4	Apartments
Welland	1.1	Welland Canal improvements
Windsor	3.0	Department store
Various locations	9.8	Provincial highway projects

Finance

A moderate tightness in the supply of loanable funds characterized credit conditions on the Canadian money market during August. Reflecting this situation, the day-to-day loan rate remained generally unchanged throughout the month at a level of 4 per cent.

Investor interest on the Canadian bond market, while generally withdrawn early in August, was activated later in the month through the offering of a new three-part \$450 million Government of Canada refunding issue. The largest portion of the floatation (\$205 million) carried a 3¼% coupon with a one-year maturity, while the two remaining parts consisted of \$100 million 5¼% bonds due May 1, 1990 and \$145 million 5½% bonds due on October 1, 1969. The attractive prices available on these new issues in relation to comparable outstanding maturities combined with the announcement of a new \$450 million wheat sale to Russia prompted a resurgence of buying interest. As a consequence, fractional price gains were generally registered by outstanding issues in

all sectors of the Canadian bond markets over the month.

New Canadian bond financings for the first eight months of 1965, at \$2.85 billion, were 40.8% higher than last year's comparable total of \$2.03 billion. Prominent amongst this month's additions to the total was a Province of Ontario \$50 million debenture issue, on behalf of Ontario Hydro, that was successfully marketed in the United States.

The reversal of the downtrend in equity prices in most sectors of Canadian stock markets which commenced in the closing few sessions of July was maintained during August. Generally, equity prices appreciated, particularly in the Industrial sector. The Toronto Stock Exchange Industrial Index, for example, closed the month at a level of 164.78, a gain of some 3.40 points on Index over the month.

Canada's official holdings of gold and U.S. dollars rose substantially during August to \$2,598 million from \$2,491 million at the end of July. Concern is presently being expressed regarding these reserves because they now exceed by some \$100 million a predetermined limit set by U.S.-Canada agreement in exempting certain Canadian borrowings in the United States from the U.S. interest equalization tax.

In terms of U.S. funds, the value of the Canadian dollar appreciated steadily during August to close the month at a level of 92.97 cents — a gain of 0.47 cents over the period.

Gross National Product

Gross National Product in the second quarter of 1965 rose to a seasonally adjusted annual rate of \$50,948 million according to recently published DBS figures.⁽¹⁾ This represented a 1.8% increase over the revised annual rate of the first quarter of this year. With prices about 1% higher, the increase in real terms was less than half of the reported quarterly advance. Yet while the increase here was slightly below that of the preceding period, it can be said that final domestic demand in the Canadian economy has grown at a sustained pace in the past three quarters. Leading the way has been consumer spending, which grew 2.8% — its highest rate of growth since the beginning of the current expansion. At the forefront have been the purchases of durables, which moved ahead of their high first quarter level, and the growing expenditure on services. While outlays for non-durables grew substantially as well, most of the growth has been attributed to price increases in this area.

⁽¹⁾ For details of Gross National Expenditure see table, page 4.

Another significant area of Gross National Expenditure has been business gross fixed capital formation, up more than 2% over the first quarter, largely because of increased outlays for plant and equipment. Government outlays for goods and services rose 2.5%, mainly due to large capital outlays at the municipal level. Moderating the total government advance was the lower Federal expenditure, the result of decreased payments for military equipment. A substantial accumulation of business inventories was in evidence, the result of an excess in the growth of domestic production and imports over the expansion in final demand. Yet, this was significantly below the very high level of the first quarter.

On the income side the notable features were the continued growth of labour income — although down from the unusually high rate of the first quarter — and the unchanged high level of corporate profits. Finally, in spite of rising national income, personal income actually fell over 1%. The sharp reduction in Canadian Wheat Board payments to farmers, after an all-time high in the first quarter, provides the explanation for this divergence.

Canadian Balance of Payments

Largely because of an import balance in merchandise trade, the deficit in the Canadian Balance of Payments remained relatively high in the second quarter of 1965. According to recently published DBS figures the deficit in the current account balance was \$360 million. While this was down from the \$397 million deficit of the first quarter, it did not compare as favourably with the second quarter of 1964, at which time the deficit was only \$148 million.

A summary statement of the Balance of Payments is presented below.

The most significant change over the year's time truly has been the disappearance of the export balance enjoyed last year. At that time extensive wheat and flour shipments to Communist countries contributed to the favourable trade balance. But in spite of the fact that these food exports have not reappeared as prominently this year, there has been a positive growth in some other export categories, particularly exports of inedible end products — in part compensating for what would otherwise have been a substantial decline in exports. The net result has been only a moderate growth in total exports. What has affected the trade balance has been the rapid growth of imports, largely due to the rise in income in Canada.

The non-merchandise trade deficit, at \$328 million, also showed slight improvement over the first quarter, but was still \$30 million greater than a year earlier. Accounting for most of this increase were enlarged net payments on travel and freight and shipping. The deficit on interest and dividend payments was \$162 million, as dividend outflows rose \$14 million to a level of \$129 million and interest payments rose \$13 million to a level of \$107 million.

Looking at the first six months of 1965 compared with that period in 1964, the current account deficit has increased about 55%, rising to \$757 million from \$486 million.

Although wheat and flour exports declined by more than \$200 million, passenger cars and motor vehicle parts were up over \$70 million, non-ferrous ores and alloys were up more than \$60 million, and newsprint and wood pulp were up \$20 million and \$15 million respectively. The result was a modest growth of 2% to \$4,015 million. Imports, on the other hand, rose by 9% to \$4,088 million. This gain tended to be more generally distributed amongst

CANADIAN BALANCE OF INTERNATIONAL PAYMENTS

	1964	1965	
	2nd Q	1st Q	2nd Q
Merchandise balance	+ 150	— 41	— 32
Non-merchandise balance	— 298	— 356	— 328
Current account balance	— 148	— 397	— 360
Capital movements ⁽¹⁾	+ 216	+ 325	+ 361
Long-term	+ 152	+ 155	+ 93
Short-term	+ 64	+ 170	+ 268
Change in official holdings of gold, foreign exchange, and net balance with I.M.F.	+ 68	— 72	+ 1

(1) Excluding change in official exchange holdings.

imports, with just a small degree of concentration evident in machinery and equipment, automobiles and parts, and certain industrial materials.

A half-year comparison of non-merchandise items in the Balance of Payments in 1965 and 1964 reveals that there has been a 2% increase in net payments, bringing this deficit to \$684 million. Almost one half of the net payments here were accounted for by the \$332 million deficit on interest and dividends; travel expenditures accounted for another 22% of non-merchandise net payments.

When looking at trade in goods and services by area, it can be seen that Canada's deficit with the United States grew to \$1,126 million in the first six months of this year — an increase of 6% over the same period last year. About 40% of this increase was ascribable to the growing deficit in merchandise trade. Once again Canada enjoyed a current account surplus with the United Kingdom — \$244 million — although the merchandise surplus declined about 6% over the year to \$265 million. Countering this was a \$20 million reduction in the non-merchandise

deficit, a result of lower payments and higher receipts of interest and dividends as well as increased business service receipts.

Capital movements in the second quarter of 1965 tended to be more heavily concentrated in short-term forms than had been observed in the two preceding quarters. Thus while the net inflow of long-term capital movements dropped from \$155 million in the first quarter of 1965 to a low \$93 million in the second, the short-term inflow increased from \$170 million to \$268 million. The decline in the inflow of long-term capital mainly was attributable to the unusually high retirement of outstanding Canadian securities. This was due to the financial reorganization of a finance company after its acquisition by new interests in the United States. The growth of the short-term capital inflow resulted from changes in Canadian holdings of bank balances and other short-term funds abroad, following a period during which these balances had been accumulated.

GROSS NATIONAL EXPENDITURE

By Quarters, 1964 and 1965, Seasonally Adjusted at Annual Rates
(Millions of dollars)

	1964					1965	
	I	II	III	IV	Year	I	II
1. Personal expenditure on consumer goods and services	28,852	29,040	29,684	30,148	29,431	30,512	31,372
2. Government expenditure on goods and services ⁽¹⁾	8,564	8,524	8,544	8,796	8,607	9,120	9,344
3. Business gross fixed capital formation ⁽²⁾	8,944	8,828	8,720	9,380	8,968	10,052	10,272
4. New residential construction	2,176	1,908	1,872	2,128	2,021	2,156	2,184
5. New non-residential construction	3,164	3,244	3,376	3,588	3,343	3,948	4,028
6. New machinery and equipment	3,604	3,676	3,472	3,664	3,604	3,948	4,060
7. Value of physical change in inventories	452	448	388	232	380	1,208	972
8. Non-farm business inventories	572	616	804	48	510	944	676
9. Farm inventories and grain in commercial channels ⁽³⁾	-120	-168	-416	184	-130	264	296
10. Exports of goods and services	9,996	10,604	10,756	10,404	10,440	10,552	10,808
11. Deduct: Imports of goods and services ..	-10,840	-10,772	-10,784	-11,076	-10,868	-11,520	-11,852
12. Residual error of estimate	-48	12	84	132	45	116	32
13. GROSS NATIONAL EXPENDITURE AT MARKET PRICES	45,920	46,684	47,392	48,016	47,003	50,040	50,948

(1) Includes outlays on new durable assets such as building and highway construction by governments, other than government business enterprises. Also includes net purchases of government commodity agencies.

(2) Includes capital expenditures by private and government business enterprises, private non-commercial institutions, and outlays on new residential construction by individuals and business investors.

(3) In the seasonally adjusted series, the value of grain production in each quarter is taken as one-fourth of the estimated value of crop production for the year as a whole. All other items in the farm inventories series are seasonally adjusted by standard techniques.

THE AREA DEVELOPMENT PROGRAM

Sept. 1965

In the August 1965 issue of the ONTARIO ECONOMIC REVIEW there appeared an outline of ARDA, the Agricultural Rehabilitation and Development Act, a significant joint venture of the federal and provincial governments to alleviate agricultural and rural problems in Canada. The following article describes another program, one undertaken by the Government of Canada.

One of the most significant examples of the recent emphasis on regional development has been the Government of Canada's Area Development Program. Having as its objective the alleviation of regional unemployment and income problems, the Program has sought to achieve it by encouraging the establishment of manufacturing and processing industries in the specific problem areas. Short-term incentives of various forms have been provided these firms to make attractive the relocation or establishment of new plants in these areas. While some relatively minor changes have been made recently, the basic intent of the Program has remained the same: that is, through the creation of new employment opportunities to increase incomes and foster improved economic growth and development in the selected regions.

The Original ADA Program

ADA, as this Program recently has been referred to, originally came into being in 1963, following the passage of the Department of Industry Act. The Minister of Industry, with whom responsibility for the Act lay, established in the Department of Industry an Area Development Agency. It was to be the responsibility of the Area Development Agency to administer ADA programs, working in close collaboration with other federal agencies, provincial and municipal authorities and industrial and commercial interests.

One of the first requirements was that of dividing the country into regions; because of the use of employment data it was decided that National Employment Service (NES) office areas be used. By means of selected criteria specific NES areas were designated for inclusion in the Program. Qualification depended on the satisfaction of one of the following conditions:

- (i) It must have been classified by the Department of Labour as a labour surplus area for at least half of the months May to October during the previous eight years, and must

have experienced a growth in the volume of employment less than half the national average during the same period.

- (ii) It must have been classified as a labour surplus area for a third of the months May to October during the past eight years, and must have suffered a *decrease* in employment during the same period.

- (iii) It must have been classified as a labour surplus area for at least half the months May to October during the past eight years, and must have suffered a *decrease* in employment in *each* of the past three years.⁽¹⁾

In the latter part of 1963 the Federal Government designated 35 NES office areas in Canada by virtue of their having qualified under the Program. The provincial distribution included one in Newfoundland, seven in Nova Scotia, five in New Brunswick, thirteen in Quebec, eight in Ontario and one in Alberta. The Ontario areas were Windsor, Chatham, Wallaceburg, Brantford, Cornwall, Pembroke, Elliot Lake and Timmins.

Three incentives were offered to manufacturing and processing industries. If they established in these areas they could obtain exemption from corporation income tax for three years after the commencement of commercial production. Most new industrial machinery and equipment for use in manufacturing and processing could be written off in two years as opposed to a normal annual rate of 20% on a diminishing balance basis. All depreciable buildings acquired in designated areas could qualify for accelerated capital cost allowances, permitting them to be written off in five years on a straight line basis instead of the normal 5 per cent a year on a diminishing balance basis.

Originally it was intended that these incentives be available until September 4, 1965. However the final date was eventually extended to March 31, 1967.

Progress Under the Program

In Ontario the initial ADA Program produced significant results both in investment and employment in several urban centres. Because of improved eco-

(1) Another provision, however, prevented an area from being designated under certain stated conditions which were considered to show that unemployment in the area was diminishing satisfactorily.

nomic conditions in Brantford and Pembroke, these two centres were de-designated in September 1964.

Across Canada the Program has involved over 250 firms, which indicated an intention to take advantage of the incentives. Employing over 18,500 workers in their plants, or about 3% of the labour force in all designated areas, these new establishments will create roughly an equal number of jobs in the construction, supply and service industries. The investment involved promises to be in excess of \$560 million — an average investment of about \$30,000 for each worker employed in the new plants.

While the Minister of Industry maintained that progress was good, he nevertheless stated that certain changes were desirable. By the very nature of the assistance given — income tax incentives — only firms able to reach a profit position at an early date in their new operations were able to benefit substantially. Other firms which had to provide for market development and other settling-in costs in the early years of operation were not benefiting to the same extent. Still other firms, particularly smaller ones, experienced difficulties in initial financing, making it impossible for them to make use of the Program.

The desire to incorporate in the ADA Program a larger portion of the national labour force was also significant in this respect. Under the existing plan only about 7½% of the national labour force had been involved. The Agency was also concerned about the unsatisfactory distribution of assistance. Four of the thirty-five NES office areas — Windsor, Brantford, and Cornwall in Ontario and St. Jean in Quebec — accounted for about three-quarters of the assistance given.

The 1965 ADA Program

In June of 1965 the House of Commons passed the Area Development Incentives Act, effective July 1, 1965. This Act established a new Area Development Account out of which funds would be made available for development grants to manufacturing and processing industries. Any such industry either establishing new facilities or expanding existing facilities would be eligible for a grant. Further, the grant was to be exempt from federal income tax but did not reduce the amount of capital cost which might be used for tax purposes.

In August complete details of the new Program under this Act were announced. The Program was to be operative until March 31, 1971. Where new facilities were being established, the grant formula could be

- (i) one third of approved capital costs up to \$250,000;

- (ii) the amount in (i) plus one-quarter of the amount of approved capital costs between \$250,000 and \$1,000,000;

- (iii) the amount in (ii) plus one-fifth of the amount of approved capital costs in excess of \$1,000,000, up to a maximum grant of \$5,000,000.

In the case of the expansion of existing facilities the same formula was to be applied to a slightly reduced figure based on approved capital costs. The maximum development grant could not exceed \$5,000,000.

Under the new Program the criteria for designated areas have been altered to include factors such as income. Counties and census division too have been made eligible. The new criteria for designation allow the inclusion of:

- (i) NES areas with continued high unemployment, or those with less high unemployment but low growth of employment, provided in either case that average annual family income in the area is less than the national average of \$5,449;
- (ii) NES areas where employment has been declining 10% each year for the past five years;
- (iii) (a) NES areas with an average annual family income below \$4,250;
(b) NES areas in which 40% or more of the families have an average annual income below \$3,000;
- (iv) a county or census division with average annual family income below \$4,250, provided it is contiguous to a designated area and which together with it form an economic region or district;
- (v) a group of NES areas recognized as a distinct geographic and economic region which, considered as a whole, meets the foregoing criteria;
- (vi) previously designated NES areas where the rate of unemployment relative to the national average is not lower in the past year than the average of the past five years.

Under these criteria 65 NES areas and 16 counties and census divisions have been designated. In Ontario ten such areas exist. Along with the specific criterion used in each case, they are: Bracebridge and Parry Sound NES areas (low average family income); Sturgeon Falls NES area (high unemployment); Elliot Lake NES area (declining employment); Owen Sound, Collingwood and Midland

NES areas (recognized as an economic region); and Haliburton county and the districts of Manitoulin and Parry Sound (contiguous areas).

Five Ontario areas formerly included have been de-designated because they no longer qualify under the revised criteria. They are Chatham, Cornwall, Timmins, Wallaceburg and Windsor.

Conceptually the 1965 ADA Program has provided many features not present in the original Program. Now covering an area containing about

16% of the national labour force, it makes available grants which can be used to finance the establishment of industries. It also enables each recipient to enjoy the full measure of benefit from the incentive.

However ambitious this Program may appear from the stated objectives, it is too early to determine its impact on the regions involved. Only after an adequate time has elapsed will it be possible to measure its success by the actual improvement in employment and income.

A PROGRESS REPORT ON THE ECONOMIC ATLAS OF ONTARIO

PROFESSOR W. G. DEAN
Department of Geography
UNIVERSITY OF TORONTO

As a result of major financial assistance from the Department of Economics and Development over the past summer the end of the research phase of the *Economic Atlas of Ontario* is now in sight. By April 1966 all research objectives will be completed as far as presently available statistical data permit.

Because this atlas is in itself a research project and the material derived from it will provide basic information for further economic and planning research, it is significant that the data sources for economic studies have been thoroughly examined. By and large the major sources have proven to be disappointing for rather detailed work. Published economic data from such sources as D.B.S., N.E.S., the Department of Internal Revenue, etc., while providing useful aggregates, have not been sufficiently detailed for a study in which a graphical presentation of the principal economic relations *within* Ontario are attempted. Nonetheless, despite these data limitations, with the aid of special research techniques over the past two and one-half years phenomenal progress has been made in mapping the outstanding aspects of Ontario's economy. When one compares the maps already prepared with those of other more "standard" atlases which took as long as twelve years to compile, the new conceptions and cartographical applications of economic data in the Ontario atlas fully justify the term "phenomenal". Numerous economic thematic maps, in many cases

of a nature never before tried, have been completed. When these are published they will provide useful sources of research material for many practical business purposes.

While the term "atlas" usually evokes images of capes and bays and islands, the *Economic Atlas of Ontario* is different. It will be possible for the reader to locate most places in Ontario, but more important, at the same time he will be able to assess the relative economic importance of a particular place from a number of points of view. As an example, the market potential for consumer goods is mapped for the whole province—with Montreal included. The mapping of this phenomenon clearly demonstrates the relevance of the market in manufacturing. Furthermore, in the manufacturing section, this seldom challenged locational cliché is substantiated in the maps analysing the industrial structure of urban centres. This is clearly shown also in maps depicting the principal factors of location with regard to energy availability, consumption and costs along with analyses of labour, water and other factors. Such analyses make this atlas an aid to industrial location and relocation. Maps of place accessibility to transportation and the availability of various kinds of carriers also aid in the assessment of the value of a particular industrial or business location.

The functional and service characteristics of all towns over 500 people are carefully presented as the basis of trading areas and an analysis of market

penetration derived from studies of population characteristics, disposable income and retail sales.

Further maps demonstrate the share of Ontario's contribution to the national economy through a taxation index and other measures. Similarly, the counties of Ontario are measured in a number of ways in order to demonstrate not only their degrees of specialization and diversity of economic activities, but also their economic "health". The larger urban centres are examined in a fashion which shows their manufacturing structure, functional aspects, division into "social" zones, and economic viability.

Unique in this atlas is a series of maps showing the recreational resources and the uses of these resources in Ontario. As an element of ever increasing importance, recreation is analysed and mapped in a detail never before achieved, including both the public and private sectors. Because of the reliance of recreation on physical elements, these are stressed in this section — the relation of snowfall to ski resorts is an example. Other aspects of the physical environment obviously have a profound effect on agriculture. Thus, in the survey of agriculture starting with a map measuring agricultural "productivity" in monetary terms, the relevant physical elements are included. But, important as these physical elements may be, the section on agriculture is primarily an analysis of the costs, problems and returns from this basic industry. It is clearly shown that while agriculture is of relatively little total value within Ontario's economy, still this province accounts for roughly one-quarter of the total agricultural production of Canada.

Public administration is of vital importance in any economic development. Therefore, a major section of the *Atlas* is devoted to a summary of the role of

administration and political control in the province. Starting with maps showing the influence of the original surveys on settlement and urban expansion, this section comprises a series of electoral maps followed by graphical displays of the various administrative elements at the provincial and municipal levels. These include maps on planning administration, public health, forestry, land ownership, municipal development, etc.

It is the purpose of the *Atlas* to be a source of useful primary and research information, besides being a standard reference for business, industrial and governmental organizations. It should also have considerable academic and educational value. Thus the presentation of material is consistent with the latest techniques of the graphic arts and is designed to be intelligible to the layman. In a number of cases, complex statistical devices have been computerized for clarity, but the representation of such material is simplified and shown as a provincial pattern. It is in this way too that the problem of absolute values is alleviated. The data base period for the *Atlas* is 1961-1965, but in every possible case this data is expressed in a ratio form so that the problem of "dating" is overcome. The assumption is that, although rapid changes may take place over a few years, the basic patterns of economic activity will remain substantially the same.

The final work of over 100 plates, comprising about 450 maps, when published in the spring of 1967 by the University of Toronto Press, will be a unique and useful source of information on Ontario. It certainly will be a colourful and original work, worthy of the proud place of Ontario in the economic structure of Canada.

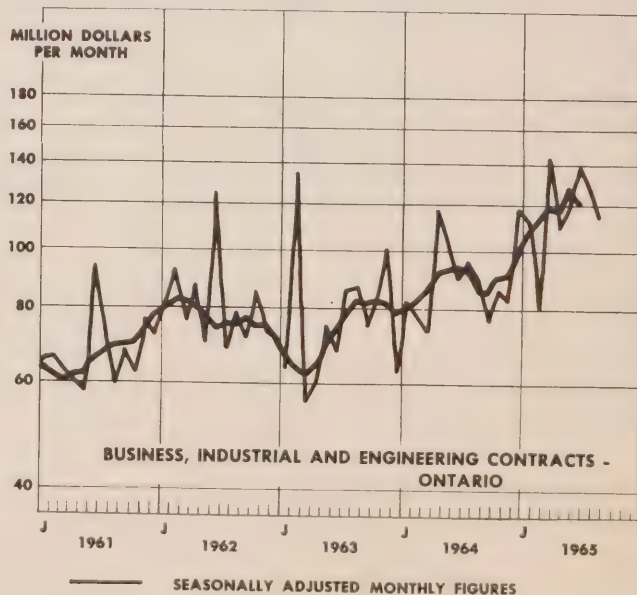
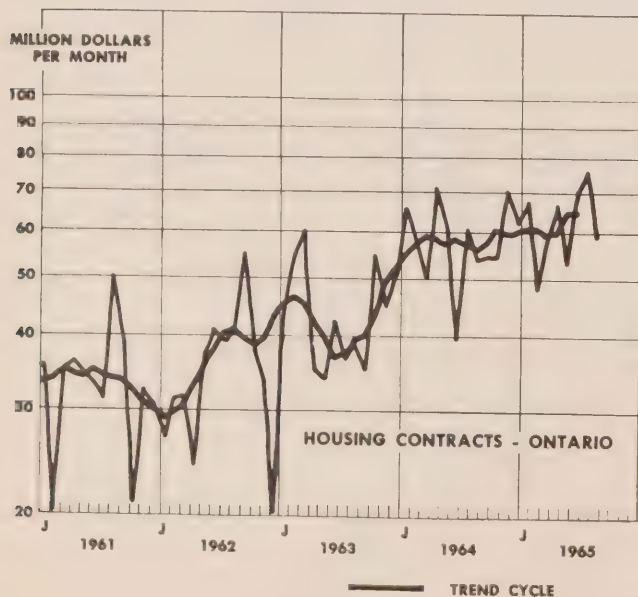
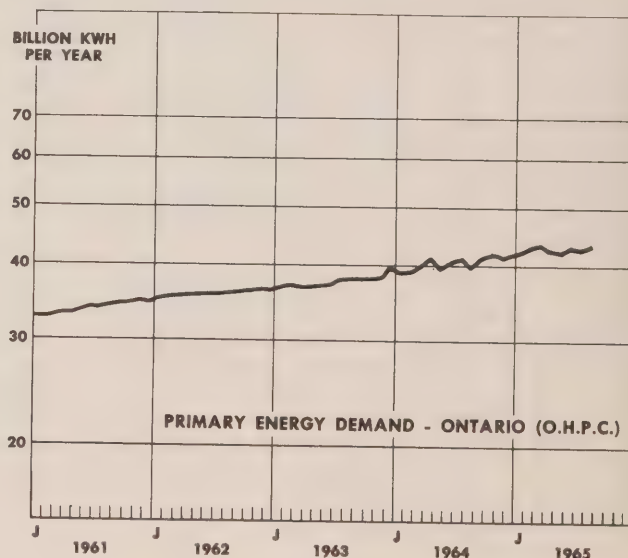
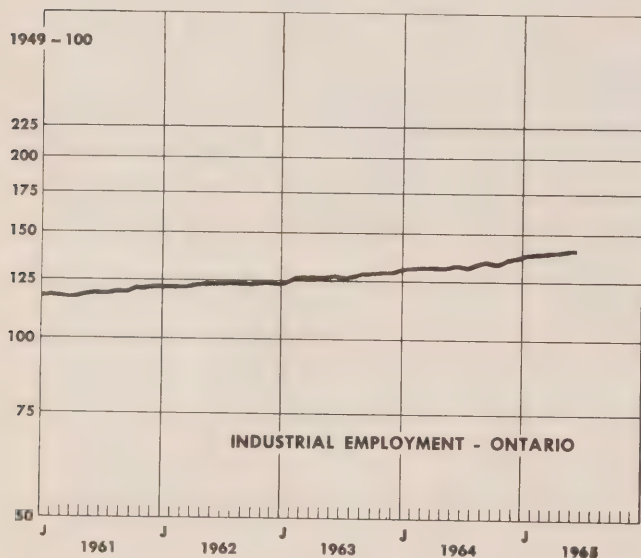
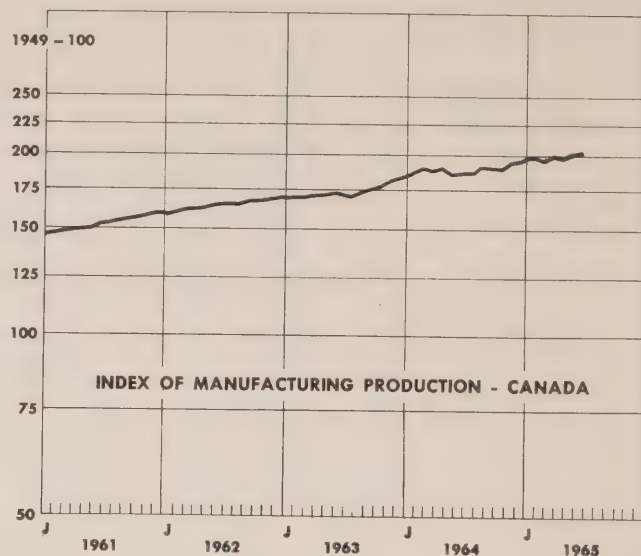
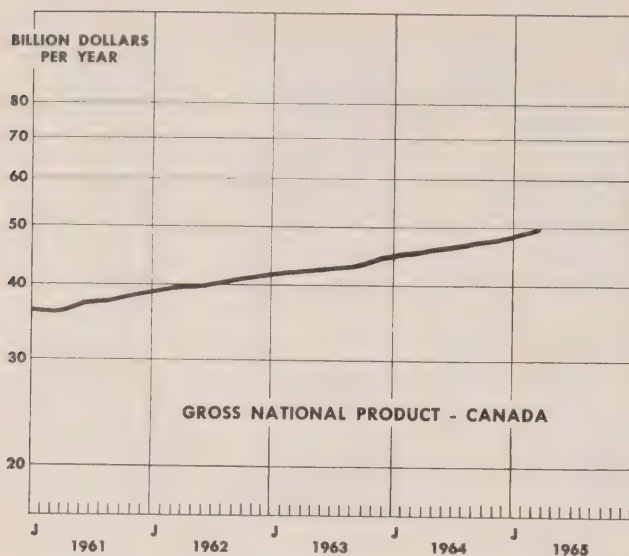
ONTARIO ECONOMIC INDICATORS - SEASONALLY ADJUSTED

(* Figures for Canada.)

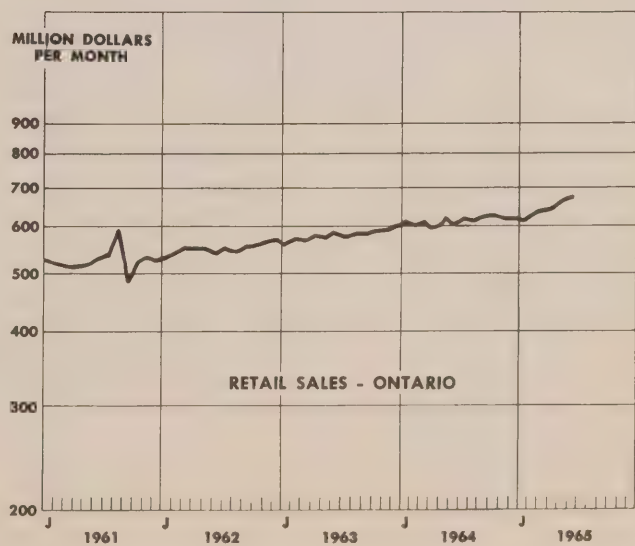
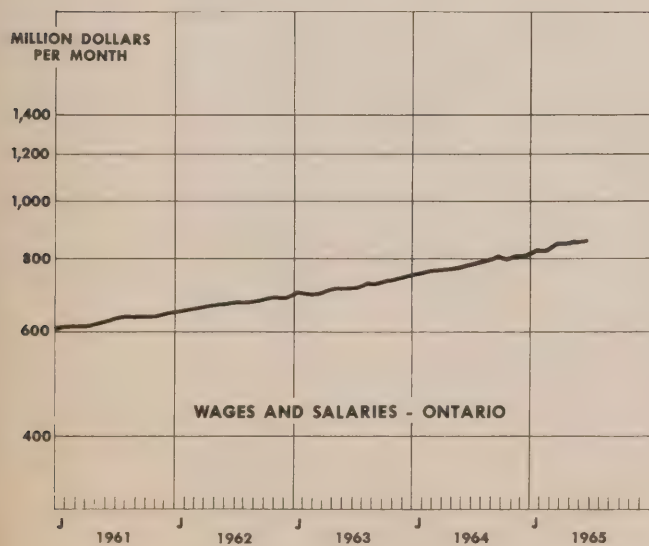
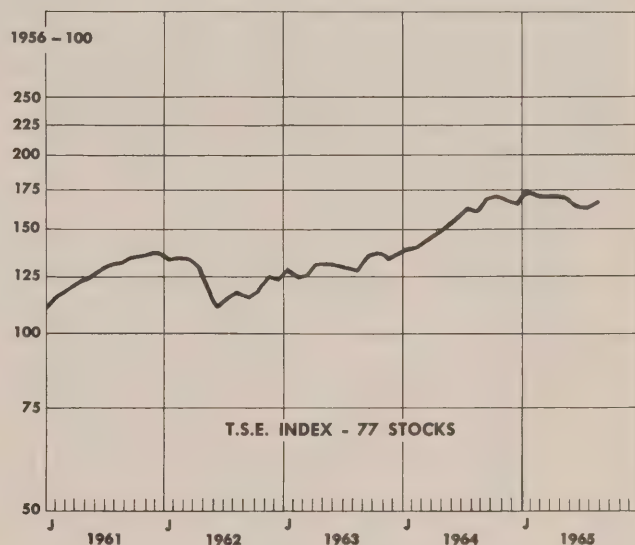
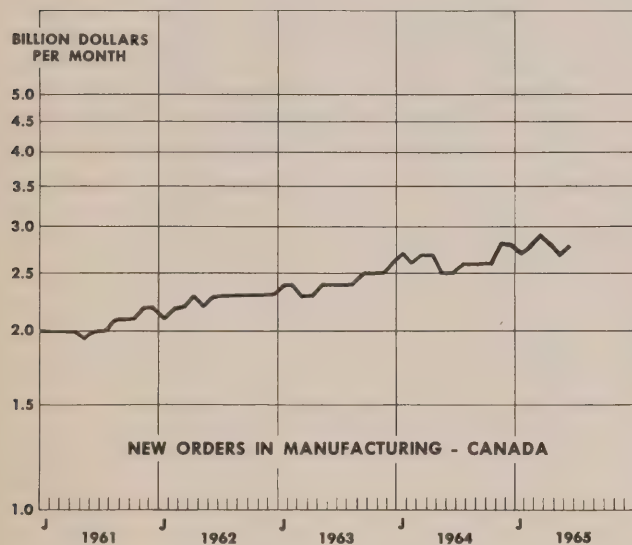
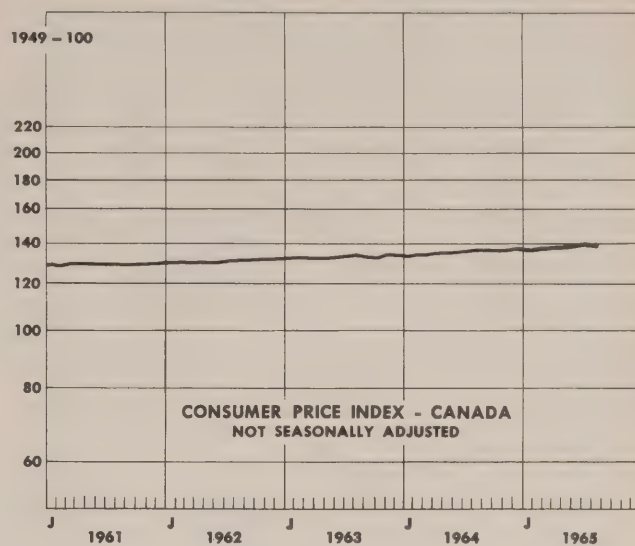
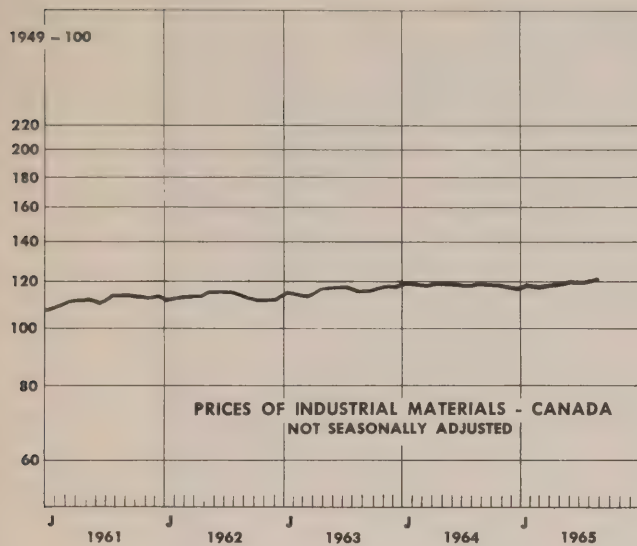
LEADING INDICATORS	1965											
	July	August	September	October	November	December	January	February	March	April	May	June
Average Weekly Hours Worked in Manufacturing(1)	41.0	41.2	41.2	41.4	40.8	41.1	41.0	40.3	41.7	41.5	41.0	
New Dwelling Unit Starts(1)	4,983	4,509	4,469	5,209	6,183	5,138	4,107	5,815	5,353	3,848	5,010	4,770
Business Failures(1)	94	83	77	93	59	78	90	77	130	67	87	62
Business Failures - Liabilities(1)	8.3	3.0	6.3	6.9	3.1	2.1	3.4	10.3	8.9	4.0	5.3	4.0
New Orders in Manufacturing*	2,554	2,591	2,615	2,619	2,735	2,750	2,677	2,792	2,865	2,818	2,729	2,798
Housing Contracts(1)	61.2	54.2	54.7	54.4	70.8	62.5	67.9	48.1	57.9	67.3	53.7	70.9
Business, Industrial and Engineering Contracts(1)	96.9	90.0	76.9	86.1	83.1	117.9	113.5	80.3	143.9	109.3	117.9	135.9
Money Supply *	17,346	17,448	17,517	17,391	17,502	17,610	17,855	18,047	18,271	18,575	18,758	19,229
T.S.E. Index - 77 Stocks(1)	162.6	160.4	169.1	169.7	168.5	165.6	170.9	172.8	170.7	171.1	169.5	163.0
1956=100												
COINCIDENTAL AND LAGGING INDICATORS												
New Dwelling Unit Completions(1)	4,178	3,714	4,287	3,806	3,432	3,236	3,667	3,727	8,392	7,115	4,518	4,019
Average Hourly Earnings in Manufacturing(1)	2.13	2.16	2.16	2.14	2.14	2.15	2.19	2.20	2.23	2.22	2.22	2,153
Gross National Product *												
Cheques Cashied in Clearing Centres(1)	3,661	3,656	3,887	3,820	3,678	3,765	3,773	3,869	3,981	4,127	4,211	4,097
Retail Trade(1)	622	619	628	630	625	624	617	631	641	659	672	679
Labour Force	2,570	2,571	2,564	2,561	2,564	2,565	2,614	2,590	2,598	2,597	2,603	2,634
Employed	2,486	2,438	2,434	2,467	2,491	2,489	2,543	2,525	2,540	2,524	2,531	2,553
Unemployed	84	83	80	94	73	76	71	65	58	73	72	82
Unemployed as % of Labour Force	3.3	3.2	3.1	3.7	2.8	3.0	2.7	2.5	2.2	2.8	2.8	3.1
Wages and Salaries	794	792	804	798	806	808	825	823	843	849	854	859
Industrial Employment(1)	131.8	134.1	134.7	133.6	136.1	136.8	137.9	138.2	139.3	139.8	140.1	140.2
Total Industrial Production *	211.6	214.6	214.4	215.1	220.9	221.1	224.3	223.1	226.7	225.5	225.5	226.1
Total Manufacturing	186.7	190.8	190.2	189.1	194.5	194.4	197.2	195.9	199.4	198.2	200.2	200.6
Non-Durables	181.8	184.4	185.0	187.1	191.0	192.7	191.4	189.8	188.9	189.3	193.2	191.6
Durables	192.6	198.3	196.3	191.4	198.6	196.4	203.9	203.1	211.8	208.6	208.5	211.1
Mining	321.3	318.9	315.3	326.7	341.2	338.1	348.3	343.3	347.5	348.7	332.9	336.0
Electric Power & Gas Utilities	407.4	403.7	416.1	426.9	421.8	434.1	429.6	437.4	441.8	435.8	443.0	433.5
Primary Energy Demand (Annual Rate) BKMWH	41.01	39.79	41.08	41.81	41.29	41.72	42.13	42.86	43.46	42.52	42.14	43.06
43.67												
ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED												
Domestic Exports *	772.4	674.1	724.0	669.9	706.6	714.2	569.2	538.3	685.5	645.5	745.7	717.6
Imports for Consumption *	637.9	566.2	616.9	636.8	673.4	656.3	559.7	551.1	730.0	699.8	735.1	798.6
Foreign Exchange Reserves *	2,534	2,576	2,625	2,687	2,743	2,674	2,668	2,649	2,554	2,567	2,499	2,480
Prices, Industrial Materials *	257.3	259.9	258.8	258.0	258.5	256.2	256.7	255.3	256.3	256.6	258.5	260.4
1935=39=100												

(1) Revised seasonally adjusted series.

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



ECONOMIC INDICATORS—SEASONALLY ADJUSTED



The Ontario Economic Review is prepared and edited monthly in the Economics Branch of the Department of Economics and Development and is available free of charge. The review is intended to provide current information on economic activity in Ontario and to act as a forum for the results of research in the public service on matters affecting the Ontario economy. The signed articles reflect the opinions of their authors and do not necessarily represent the views of the Economics Branch. All correspondence should be directed to the Editor, Ontario Economic Review, Economics Branch, Department of Economics and Development, 950 Yonge St., Toronto 5.

ONTARIO ECONOMIC REVIEW



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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

CONTENTS

The Ontario Economy	1
Educational Achievement Levels in Ontario, <i>Miss Helen L. Madge</i>	3
<i>Appendix: Compulsory School Attendance</i>	9
Indicators and Charts	10

THE ONTARIO ECONOMY

The size of the Ontario labour force declined to 2,600 thousand in September from 2,641 thousand the previous month, as students left the labour force to begin another school year. Employment remained relatively high at 2,531 thousand; as a consequence the unemployment rate was a low 2.7 per cent.

Further evidence of continuing buoyancy in the economy came in the form of expanded construction activity, although housing contract awards declined in September due to higher mortgage costs. The value of business, industrial and engineering contract awards rose sharply to a record \$155.7 million, an increase of 35.4 per cent in one month alone. The concentration of activity in the latter group is regarded as favourable since it will act to increase productive capacity over the months to come. At the same time concern over the possible price implications of increased construction activity has abated somewhat.

Production

Following several months of relative stagnation, the seasonally adjusted Canadian Index of Industrial Production (based on 1949 = 100) moved forward again in July, this time surpassing the record level of 226.7 established in March of this year. At 228.3, the July figure represents a growth of 1.0 per cent over the figure for the previous month and 8.3 per cent over July 1964. Most significant to the increase in July was manufacturing, increasing 1.3 per cent in one month's time. Non-durables rose 1.5 per cent, mainly due to large advances in beverages, textiles and meat products. The durables index increased 1.0 per cent, the most prominent components being motor vehicles and parts, averaging a 6.0 per cent increase. Moderating these significant gains were lesser gains in other durables and decreases of 1.2 and 2.8 per cent in wood products and electrical apparatus and supplies respectively. Of the other major components of the Index, mining rose 0.8 per cent over the previous month — copper led the advance with a 14.1 per cent gain while gold, down 8.8 per cent, showed the greatest decline — and electric power and gas utilities declined marginally by 0.4 per cent.

In September steel ingot production was 808,818 tons. While this was 6.3 per cent less than the August figure of 863,344 tons, it represented an increase of 10.0 per cent over September 1964. Pig iron production at 584,843 tons was down 7.8 per cent from August, but up 5.5 per cent over September 1964.

The seasonally unadjusted value of manufacturing shipments in Ontario, at \$1,426 million in July, was 15.9 per cent higher than in July of last year.

Retail Sales

Seasonally adjusted retail sales in Ontario during August were valued at \$669 million, up 8.1 per cent from a year earlier and down 0.4 per cent from the July level of \$672 million. D.B.S. estimates, unadjusted for seasonal variation, place Ontario's retail sales in the January to August period at \$5,028 million. This indicates an increase of 6.6 per cent over the same eight-month period in 1964. Particularly pronounced was the growth of motor vehicle sales — up 11.5 per cent. At \$914 million, motor vehicle sales accounted for almost 18 per cent of the value of all Ontario retail sales in the January to August period. All other types of businesses also experienced increased sales. Among those retailers displaying significantly increased sales were variety stores (11.4 per cent), selected foods and beverages (11.1 per cent), jewellery (8.2 per cent) and men's clothing (7.9 per cent).

Over the same period the whole of Canada enjoyed a 6.1 per cent increase in retail sales. Sales totalled \$13,709 million in the eight-month period of 1965. Ontario accounted for the largest share — 37.1 per cent, followed by Quebec (25.2), British Columbia (10.6), Alberta (8.2), Saskatchewan (5.8) and Manitoba (4.7). The Atlantic provinces collectively accounted for 8.4 per cent of retail sales. Displaying the greatest growth in Canada were variety retailers, up 13.1 per cent over the January to August period in 1964. This was followed by motor vehicle sales, which grew by 10.1 per cent. Lumber and building material sales had the smallest percentage increase — 1.9 per cent. None of the categories declined.

Prices

In October the Canadian Consumer Price Index (1949=100) was at a level of 139.3, down from the July record high of 139.5, and only 0.1 per cent above the September figure of 139.1. Over the last month the more notable components of the Index were food and clothing, the former declining 0.5 per cent and the latter rising 1.5 per cent. Transportation along with tobacco and alcohol did not change, while the other components rose only moderately. A comparison of October figures for 1964 and 1965 reveals that the greatest increases have taken place in transportation (5.2 per cent), health and personal care (4.1 per cent) and food (3.6 per cent). The increase in transportation is mainly attributable to regional increases in taxi rates and urban transit fares as well as higher gasoline prices. Limited production and poor weather account for most of the increase in food prices.

The Wholesale Price Index of 30 Industrial Materials, based on 1935-1939=100, rose to 261.6 in October, an increase of 0.5 per cent over the past month. The most recent data available show that there has been a decrease in the price of steel scrap, raw sugar, hogs, tin and linseed oil, and an increase in the price of beef hides, raw wool and raw cotton.

The wholesale index for Canadian Farm Products, at 237.2 in October, was 2.2 per cent higher than September. This was made up of a 3.4 per cent increase in the price of field products and 0.2 per cent increase in animal product prices.

Finance

Though the total supply of money continued to expand, reaching an all-time high of over \$19.5 billion by the end of September, the supply of loanable funds in the Canadian money market was still somewhat limited. Reflecting this condition, the day-to-day loan rate was generally quoted at around four per cent during the period.

The volume and value of trading on Canadian bond markets was comparatively light and prices of outstanding issues generally tended to drift irregularly lower. On average, however, price changes were confined to fractions. Highlighting the month's otherwise dull character was the floatation of a few sizeable new issues. Prominent amongst these was a new \$50 million 5½ per cent Province of Ontario 20-year bond issue that was priced to yield 5.60 per cent.

New Canadian bond financings for the first nine months of 1965 totalled some \$3.18 billion, an increase of 25.3 per cent from last year's comparable total of \$2.54 billion. Representing a good portion of this increase is the increase in new corporate bond financings; so far this year, at \$1.14 billion, they are some 76.0 per cent higher than last year's value of \$0.65 billion.

Prices of quality industrial equities throughout most sectors of the Canadian stock exchanges generally tended to improve during the first half of September, but thereafter were subjected to modest profit taking pressures. The Toronto Stock Exchange Industrial Index, after appreciating to a level of 169.52, subsequently declined to close the month at 167.52 — an overall increase nevertheless of 2.14 points on Index over the month.

Canada's foreign exchange reserves increased by \$16.1 million during September and thus closed the month at a level of US\$2,614.1 million. These reserves are held by the Bank of Canada, the Finance Ministry and the Exchange Fund Account and are used to defend the Canadian dollar against wide fluctuations in exchange markets.

The value of the Canadian dollar in terms of U.S. funds remained at a fairly constant level throughout September; fluctuations were confined to a range of 0.10 cents. The dollar closed the month at a level of US 92.95 cents for a net decline of 0.02 cents over the month.

CANADIAN CONSUMER PRICE INDEX

(1949 = 100)

	October 1964	July 1965	August 1965	September 1965	October 1965
ALL ITEMS	135.6	139.5	139.4	139.1	139.3
Food	131.0	139.0	137.8	136.4	135.7
Housing	139.2	141.1	141.2	141.5	141.6
Clothing	120.7	121.1	120.7	121.4	123.2
Transportation	141.4	147.0	147.9	148.7	148.7
Health and personal care	170.0	175.4	175.8	176.0	177.0
Recreation and reading	151.1	154.6	154.6	154.0	154.2
Tobacco and alcohol	121.4	122.5	122.6	122.6	122.6

EDUCATIONAL ACHIEVEMENT LEVELS IN ONTARIO

MISS HELEN L. MADGE

Senior Economist, Economics Branch

ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

In the early years of Ontario, education was considered necessary for the reasonable functioning of a democratic political system. As our economic and social structure has increased in complexity, education and training have become important on economic grounds.

The first legislation in the province embodying the principles of the right to education for all was the *School Law Improvement Act* of 1871. Over the years improvements and additions to the legislation have been made to strengthen the enforcement mechanism of the compulsory features of the educational legislation and to increase the age limits under these regulations, as well as to increase the duration of the school year. Enforcement was a serious problem in the rural areas in the 19th century, but effective compulsory education has been in force in most parts of the province since 1919.⁽¹⁾

The changes in legislation reflected the changing attitudes of the people toward the importance of education. While the compulsory features have not been changed in the past 45 years, public assistance for higher education has increased tremendously. Moreover, the local availability of higher levels of education has improved a great deal. These changes in the availability of higher education have taken place in spurts. Universal availability of secondary school facilities in all parts of the province became a goal in the period just prior to World War II and the continuation school was begun as a move to make this possible. Provincial grants for capital costs of schools and increased *per capita* grants toward current school costs have made possible the availability of a high standard of education over the entire province. As a result of the establishment of secondary school facilities in many of the smaller towns and villages across the province, there was a steady rise in the proportion of young people continuing to secondary school in this period. Enrolment in secondary schools increased from 23.9 per cent of the 15 to 19 year age group in 1922 to 34.4 per cent in 1937, and to 40.0 per cent by 1949.

The post-war period saw a complete change in the attitude toward education in Canada. In earlier

times, education was considered a necessity to make a person a good citizen and to broaden his private life and interests. However, in the post-war period formal training and education have become an economic necessity. Public support moved from the secondary school to the university level. The expansion of university facilities, increased provincial assistance to both universities and students, and the commencement of many new universities and colleges in the province were the main features of the educational revolution of the 1950's.

In the sixties, this stress on education along with the dearth of employment opportunities for both the unskilled and new labour force entrants has brought tremendous increases in school and university attendance. By 1964 secondary school enrolments totalled 395,000 in Ontario, or 74 per cent of the 15 to 19 year age group. University enrolment rose to 12.8 per cent of the 18 to 21 year age group in the province, up from an average of about 4.5 per cent in the first half of this century and of just 7.2 per cent as recently as 1956. The rate of increase in the proportion of young people attending university will likely level off as opportunities for alternative training increase in the province. The limit at the present time seems to be the capacity of the universities.

The past two or three years have seen a new expansionary phase in education with an enormous expenditure on vocational and technical training facilities. The drying up of the flow of immigration from Europe in 1959 and 1960 made people aware that for technical workers we have been almost completely dependent on persons trained elsewhere. The phenomenon of relatively high levels of unemployment accompanied by scarcities of skilled personnel brought a growing awareness of the importance of education and strengthened the pressures to make an all out effort to provide technical training facilities.

Studies of types and length of training in technical fields have been made in only limited areas for a few specified occupations. Most persons trained in this country have attained their skill or technical competence through on-the-job training. In many fields the major part of the labour force with the

⁽¹⁾ See appendix: "Compulsory School Attendance", page 9.

required skills consists of immigrants with varying backgrounds which are difficult to assess on a statistical basis. In this country, therefore, there have not been any overall measurements of the achievement levels in other than the academic area. The apprenticeship and trades school training are not taken into account in the measures of educational achievement, so that there may be some underestimation of levels of education in the middle categories. The measures at the top and at the bottom of the achievement levels in the *Census of Canada* are probably quite reliable.

Table I shows the educational achievement levels of the Ontario non-school population for the years 1941, 1951, and 1961. The data are not completely comparable for the three years as the 1941 census counted population 10 years of age and over; 1951, 5 years and over; and 1961, 15 years and over. Unfortunately the 1951 data include some pre-school children in the group. These would naturally have less than five years elementary school education.

Senior matriculation and post-secondary education has shown the largest proportionate increase in the twenty year period 1941 to 1961. The proportion having one to four years of secondary school education also rose, although not so spectacularly. The increase in the level achieved was of course most marked in the younger groups in the population. For example, in 1961, 7.6 per cent of the 25 to 44 year age group had some university education, 6.3 per cent of the 45 to 64 year olds were in this

educational category, whereas only 3.9 per cent of those over 65 had any university education. The statistics for the under 24's are slightly misleading, as an increasing proportion of these are still attending educational institutions; for example, in the 1964-65 school year, nearly 13 per cent of all the 18 to 21 year olds in the province were attending university.

The provinces are responsible for education and to a large extent the legislation and government assistance policies determine the educational level of the populace. However, in Ontario a large proportion of our population growth is the result of migration. During the past twenty years we have had a tremendous immigration of professional and highly skilled persons from Europe to supply the technical competence needed in so many areas of Canadian industry. These have added to our general educational level. At the same time we have had an increased immigration of virtually illiterate groups, and these also affect the structure of our populace. This may be part of the reason for the continuing fairly high proportion of the population which has less than five years elementary education. See Table II.

The levels of educational achievement in Ontario have varied not only over time, but also very substantially from one part of the province to another. Educational levels are, on the whole, lower in the rural areas than in the urban communities, but there are some rural areas with a fairly high

TABLE I
ONTARIO EDUCATIONAL ACHIEVEMENT
Population⁽¹⁾ Not Attending School

	Census Years		
	1961	1951	1941
	Number		
Not stated			19,487
Less than 5 years elementary	239,097	312,689	205,279
5 years or more elementary	1,471,078	1,378,881	1,273,735
1 - 4 years secondary	1,612,621	1,274,945	1,005,672
13 years schooling and over	572,656	364,906	229,286
TOTAL	3,895,452	3,331,421	2,733,459
	Percentage of Total		
Not stated			0.7
Less than 5 years elementary	6.1	9.4	7.5
5 years or more elementary	37.8	41.4	46.6
1 - 4 years secondary	41.4	38.3	36.8
13 years schooling and over	14.7	10.9	8.4
TOTAL	100.0	100.0	100.0

⁽¹⁾ 1961: 15 years of age and over;
1951: 5 years of age and over;
1941: 10 years of age and over;

Source: D.B.S., *Census of Canada* 1961: Bulletin 1.3-6;
1951: Volume I, Table 59;
1941: Volume I, Table 56.

proportion of the population which has high school education. The proportion with university education is low in nearly all of the rural areas. However, the persons with practically no formal education are scattered through the mining and logging areas, some of the marginal agricultural counties and some of the urban communities. The only rural agricultural area which has a higher than average proportion of persons with less than five years schooling is in Eastern Ontario — Glengarry, Lanark, Prescott and Russell counties.

TABLE II
EDUCATIONAL ACHIEVEMENT OF
THE CANADIAN BORN AND IMMIGRANT
POPULATION, CANADA, 1961

	Canadian Born Population	Immigrant Population		
		Before 1931	1931- 1945	1946- 1961
Percentage of Total 15 Years Old and Over				
No schooling	1.2	4.0	1.8	1.3
Elementary				
1 - 4	6.6	11.2	6.0	7.0
5 +	34.3	45.7	31.8	34.9
Secondary				
1 - 2	24.3	17.3	19.2	17.5
3	10.5	5.7	8.8	8.4
4 - 5	16.7	11.8	20.9	21.5
Some university	3.5	2.5	5.8	5.1
University degree	2.9	1.8	5.9	4.3
TOTAL	100.0	100.0	100.0	100.0

Source: D.B.S., *Census of Canada, 1961*, Bulletin 7.1-10, page 32.

In 1961 6.2% of the total Ontario population⁽²⁾ had some university education. Only two of the ten economic regions of the province showed a higher than average proportion in this category — the Metropolitan and Eastern Ontario regions. The lowest proportion was in Georgian Bay but Northeastern Ontario and Northwestern Ontario showed only slightly higher proportions of persons with some university education.

A larger than average proportion of university educated people in the Metropolitan and Eastern Ontario regions was evident in all age categories.⁽³⁾ This may be the result of the types of industry and institutions in these two areas, but it may also be partially a result of the local availability of university education. In the Eastern region, the majority of the university-educated population are in the two counties of Carleton and Frontenac. The government at Ottawa in Carleton county attracts a

large number of university graduates from across Canada. Moreover, there are three institutions of higher learning in the city of Ottawa, so that both the factor of demand for graduates and the availability of university education are present in this area. Frontenac county contains the city of Kingston which again is largely a city of institutions. The university, the Royal Military College, the penitentiary, and the Military Staff College all use a significant number of professional personnel, and the presence of the university permits easy access to higher education. The strictly rural counties of Glengarry, Lanark, Russell, and Dundas have very few university-educated people, as one would expect.

The Metropolitan region shows a fairly high level of university-educated population in all three western counties. In Halton, 5.4 per cent had a university degree in 1961, and an additional 4.2 per cent had some university education. In Peel, the percentages were 5.0 and 3.7, and in York 4.7 and 3.5. A fairly general spread of industry and institutional organizations along the lakeshore is reflected in these figures.

The largest proportion of the population with less than elementary education was in the Northwestern and Northeastern regions with 13.5 per cent and 10.8 per cent of the population. In the Northwestern region, the relatively large proportion of the population with very little elementary schooling was evident in all age categories. In Northeastern Ontario, the proportions were very high in the older age categories, but in the 20 to 24 age group, it was 2.5 per cent, the same as the provincial average, and in the 15 to 19 age category it was lower than the provincial average of 3.0 per cent. Midwestern Ontario had the smallest proportion in this low education category and this area also had fewer in this category in all age groups than did other regions in the province.

However, the Midwestern region had a larger proportion with five years or more elementary education than the average for the province for all age categories, and had a lower than average proportion with higher education. This area is long settled with well-established community facilities and with less population interchange than most other parts of Ontario. As a result, the population has for the most part completed public school or had some secondary school education.

Certain parts of the province which one would expect to have overall high levels of education have some strange pockets or groups with very little education. Thus in Metropolitan Toronto in the young working ages there is a larger than average

⁽²⁾ Total population refers to population 15 years of age and over, not attending school.

⁽³⁾ See Table III, page 8.

LEGEND

Percentage of the adult non-school population with some university education

Under 3.5	4.5 - 6.1
3.5 - 4.4	6.2 + *

*Ontario average - 6.2

Economics Branch / Department of Economics and Development

EDUCATIONAL ACHIEVEMENT: LESS THAN 5 YEARS

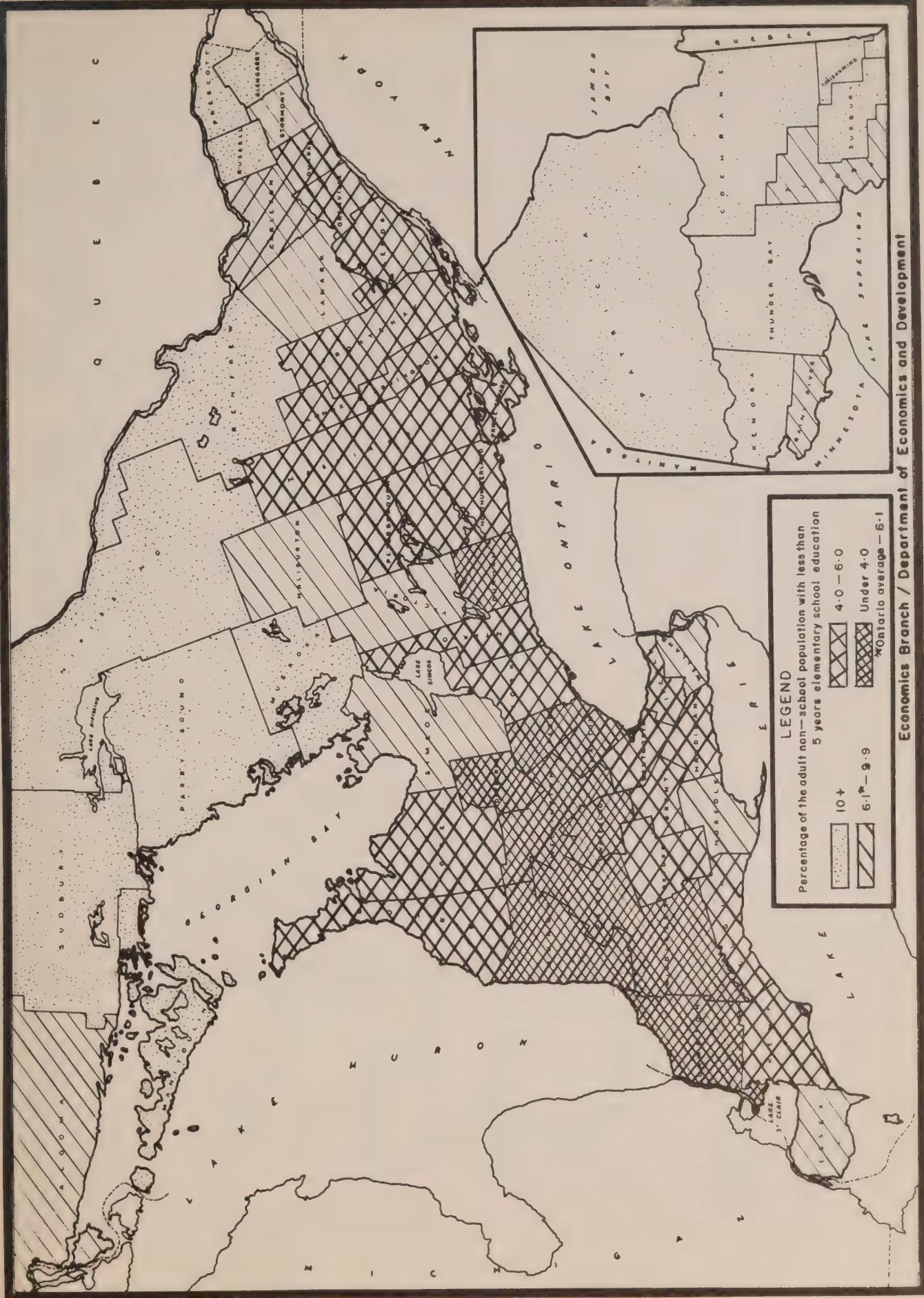


TABLE III
ONTARIO EDUCATIONAL ACHIEVEMENT BY ECONOMIC REGIONS
Population Not Attending School, in Selected Age Groups (15 years and over)
June 1, 1961

	Eastern Ontario	Lake Ontario	Metro- politan	Niagara	Lake Erie	Lake St. Clair	Midwestern Ontario	Georgian Bay	North- eastern Ontario	Lakehead Northwestern Ontario	Grand Total Ontario
Ages 15-19											
Less than 5 years elementary	4.5	2.2	2.5	1.6	1.6	1.6	1.3	5.6	2.5	12.7	3.0
5 years or more elementary	27.3	28.6	24.3	28.5	28.4	26.7	31.9	30.2	38.3	31.0	28.4
1, 2 or 3 years secondary	49.6	54.3	55.5	54.5	50.6	51.1	51.6	52.2	47.5	45.0	52.2
4 or 5 years secondary	18.0	14.6	17.3	15.0	19.1	20.1	14.8	11.8	11.4	11.1	16.0
Some university	0.6	0.3	0.4	0.4	0.3	0.5	0.3	0.2	0.3	0.2	0.4
University degree	—	—	—	—	—	—	0.1	—	—	—	—
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ages 20-24											
Less than 5 years elementary	2.2	1.2	3.2	1.8	1.3	1.3	1.0	3.1	2.5	7.9	2.5
5 years or more elementary	21.6	21.9	21.7	22.8	21.6	20.0	26.4	24.9	30.8	25.3	23.1
1, 2 or 3 years secondary	41.8	47.5	40.7	44.8	42.8	41.8	42.8	46.8	41.3	42.2	42.4
4 or 5 years secondary	29.2	26.8	28.9	26.5	30.4	32.5	26.2	22.8	22.6	21.4	27.6
Some university	3.1	1.7	3.5	2.8	2.5	3.0	2.4	1.5	2.1	2.4	2.8
University degree	2.1	0.9	2.0	1.3	1.4	1.4	1.2	0.9	0.7	0.8	1.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ages 25-44											
Less than 5 years elementary	3.2	2.0	3.7	2.9	2.1	2.3	1.4	3.1	5.9	8.1	3.3
5 years or more elementary	29.6	35.4	27.7	34.1	32.4	33.2	38.1	38.9	41.9	35.6	32.6
1, 2 or 3 years secondary	32.8	36.9	34.0	37.1	35.9	35.5	35.5	36.0	31.1	35.3	34.5
4 or 5 years secondary	23.9	20.6	24.9	20.0	23.1	22.3	19.3	17.7	16.3	16.3	22.0
Some university	3.9	2.3	4.1	2.7	2.8	3.2	2.5	2.1	2.4	2.4	3.3
University degree	6.6	2.8	5.6	3.2	3.7	3.5	3.2	2.2	2.4	2.3	4.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ages 45-64											
Less than 5 years elementary	8.3	5.9	6.8	7.3	5.1	7.6	4.0	7.5	16.9	17.5	7.8
5 years or more elementary	40.1	49.8	39.1	46.8	46.1	49.0	54.1	53.5	47.9	45.1	44.5
1, 2 or 3 years secondary	24.7	25.6	26.9	26.9	28.0	24.5	24.7	23.3	20.0	23.0	25.6
4 or 5 years secondary	18.3	14.4	19.1	13.8	15.4	13.8	12.3	12.1	11.0	10.5	15.8
Some university	3.4	2.0	3.3	2.5	2.4	2.4	2.2	1.8	2.0	2.0	2.7
University degree	5.2	2.3	4.8	2.7	3.0	2.7	2.7	1.8	2.2	1.9	3.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ages 65 and over											
Less than 5 years elementary	17.9	13.3	12.4	13.6	9.5	16.3	9.8	16.3	34.7	30.6	15.1
5 years or more elementary	50.3	59.9	51.9	56.8	58.6	56.9	66.4	61.0	46.7	48.0	55.0
1, 2 or 3 years secondary	14.9	15.3	17.8	17.4	19.3	15.8	14.2	13.7	10.6	13.2	16.2
4 or 5 years secondary	12.0	8.6	12.8	8.8	9.3	8.1	6.8	6.6	5.9	6.1	9.9
Some university	2.2	1.4	2.2	1.7	1.5	1.5	1.3	1.1	1.0	1.2	1.7
University degree	2.7	1.5	2.9	1.7	1.8	1.4	1.5	1.3	1.1	0.9	2.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ages 15 and over											
Less than 5 years elementary	6.6	4.9	5.5	5.5	4.0	5.8	3.4	6.9	10.8	13.5	6.1
5 years or more elementary	34.5	42.2	33.2	39.7	39.3	40.1	45.8	45.8	42.5	38.5	37.8
1, 2 or 3 years secondary	29.8	31.7	31.4	32.8	32.3	30.4	30.6	29.8	28.4	30.4	31.0
4 or 5 years secondary	20.9	17.1	21.9	17.0	19.2	18.5	15.7	14.1	14.4	13.8	18.9
Some university	3.3	1.9	3.5	2.4	2.4	2.6	2.0	1.7	2.0	2.0	2.8
University degree	4.9	2.2	4.5	2.6	2.8	2.6	2.5	1.7	1.9	1.8	3.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: D.B.S., Census of Canada, 1961, Bulletin 1:3-6; Counties — Special Tabulation.

proportion of persons with less than five years elementary schooling. The influx of large numbers of persons from southern Europe and from some of the outlying regions in Canada to work in the construction and service trades has brought the Toronto area an unusually large number of people with little or no formal education.

Ontario has had compulsory education legislation almost since the province was established. In spite of this, we have a fairly large proportion of persons with very little education. In some areas this is because of the difficulties of enforcing the compulsory features of the education acts, and in other

areas it is because of the numbers of migrants with poor educational backgrounds. If we are to ensure a high level of education, we must improve the availability of education in the remote areas of our own province. We must also make sure that the persons coming here from other countries have at least the minimum education that we consider essential for good citizenship and economic independence. It is apparent that some more-comprehensive program of basic education for adults is essential in those areas where changing economic conditions are making the manual and unskilled workers redundant.

COMPULSORY SCHOOL ATTENDANCE

The following is an excerpt from the Ontario Royal Commission on Education, Report of the Royal Commission on Education in Ontario, Printer to the King, Toronto, 1950; chapter 3, pages 41-43.

"When schools were first established and maintained in Upper Canada, in part at least at public expense, attendance of pupils was voluntary, as in other countries. Once the principle of free schools had been accepted and had become generally effective, however, the idea of compulsory attendance at school came to the fore. It seems to have been based on a number of beliefs, constituting an unusual mixture of economic and humanitarian motives that every child had a right to a common school education; that, in return for his financial support, the taxpayer might justly require that every child be educated; and that it was the duty of the parent to educate his child. As a result of these convictions, the School Law Improvement Act of 1871 included the following modest provision for compulsory attendance:

'Every child, from the age of seven to twelve years inclusive, shall have the right to attend some school, or be otherwise educated for four months in each year; and any parent or guardian, who does not provide that each child between the ages aforesaid under his care shall attend some school, to be otherwise educated, as thus of right declared, shall be subject to the penalties hereinafter provided. . . .'

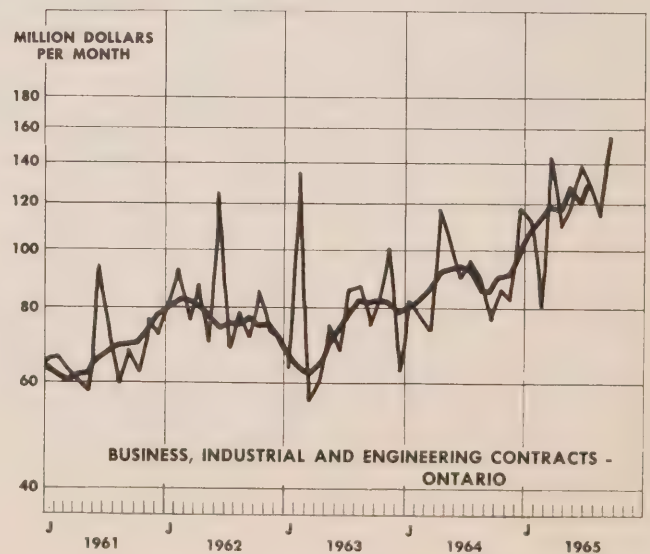
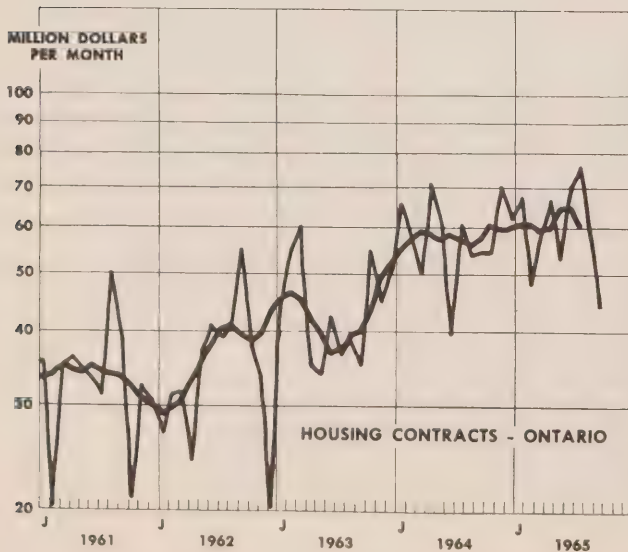
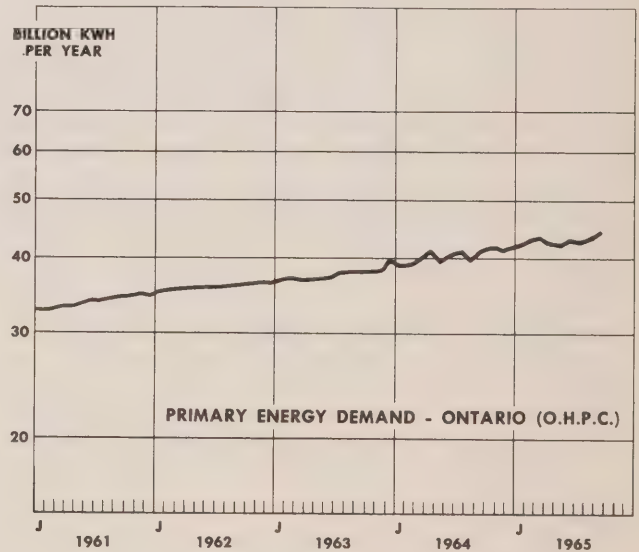
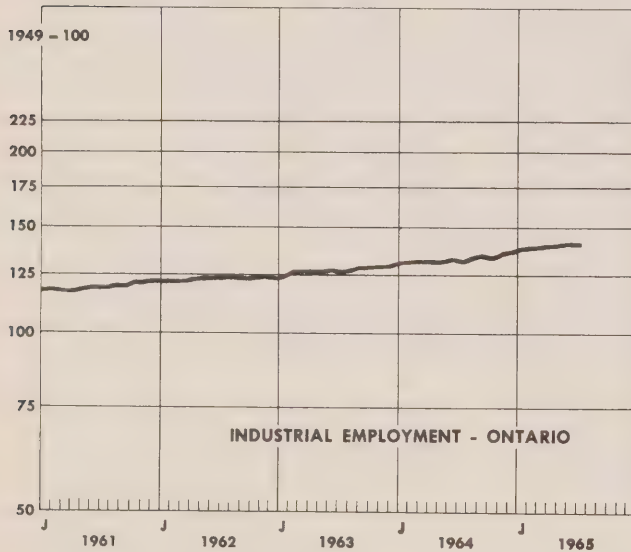
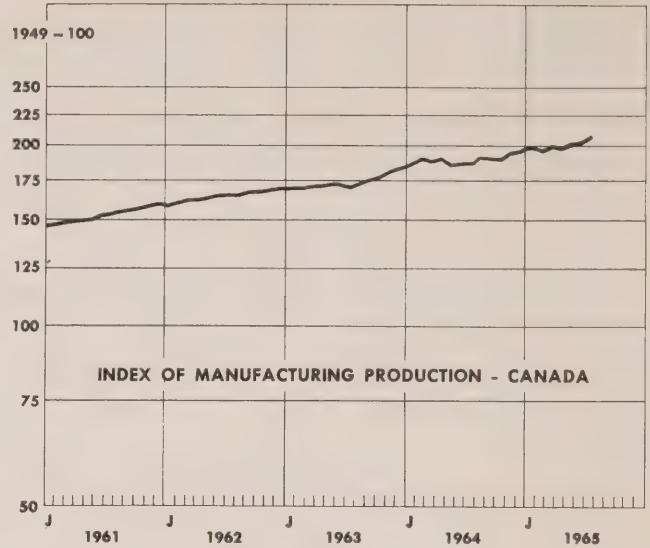
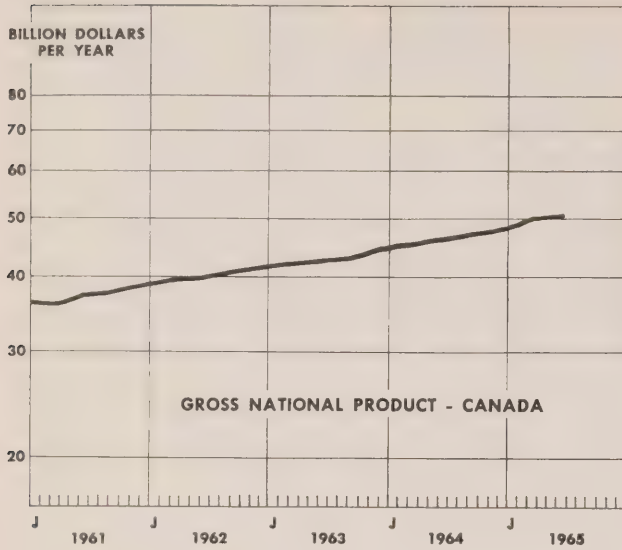
"It was not until 1881, however, that municipal assessors were required to register all children between the ages of 7 and 13, and school boards empowered to appoint officers to enforce compulsory attendance. Somewhat later, the length of the period of compulsory school attendance was extended to 100 days each year. But school boards failed to measure up to their responsibility; and even as late as 1886, 23 per cent of the rural population within the compulsory school attendance age attended less than the required 100 days per year. To remedy this, the Truancy Act of 1891 was enacted. Full-time attendance for the school term was required of all children between the ages of 8 and 14; exceptions were allowed in cases of sickness or other unavoidable causes, or where the child was excused from attendance by the

school principal or a justice of the peace, or where he had passed the high school entrance examination; and penalties were provided, applying to parents and guardians who refused to comply, and to any person who, during the school term, employed a child under the age of 14. Although this legislation brought about a marked improvement in school attendance, the Act was not fully enforced, particularly in rural areas. Hence, in 1919, the School Attendance Act and the Adolescent School Attendance Act were enacted. They required the appointment of local attendance officers, whose work was to be supervised and co-ordinated by a provincial attendance officer. The general provisions of this legislation are still in effect.

"Today, The School Attendance Act requires that every child between the ages of 8 and 14 attend school for the full term, and responsibility for such attendance is placed on the parent or guardian. General exemptions are provided in cases of sickness or other unavoidable causes, excessive distance from school, insufficient accommodation, and where children are receiving efficient instruction elsewhere, or have passed examinations equivalent to university matriculation or entrance to normal school. Every child between the ages of 5 and 8 who has been registered as a pupil must attend at least during the term in which he is enrolled. Provision is made that a child under the age of 14 be not employed during school hours, except in case of urgent necessity as certified by a school attendance officer, and then for not longer than six weeks during the school term.

"The present Adolescent School Attendance Act requires the full-time attendance of every adolescent between 14 and 16 years of age; and, in municipalities where part-time courses are provided, it requires part-time attendance, for at least 320 hours per year, of those between 16 and 18 years of age. Unfortunately, an extensive and complicated set of exemptions and exceptions largely nullifies these requirements. . . ."

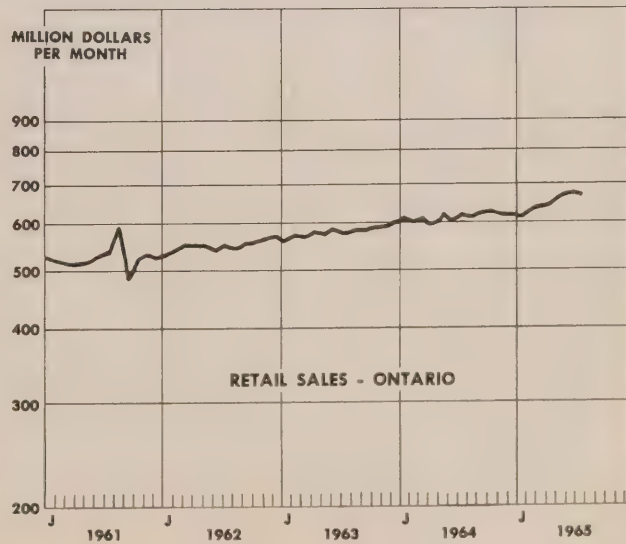
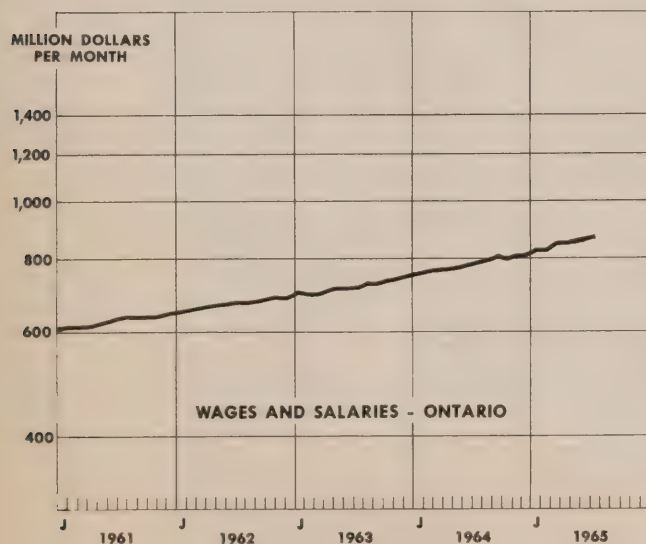
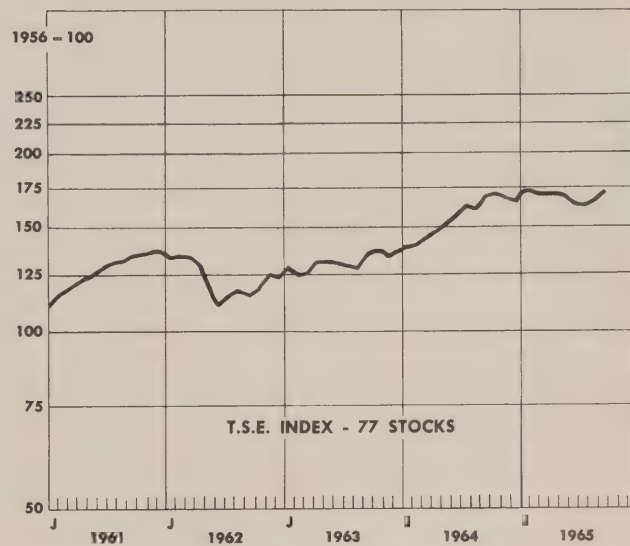
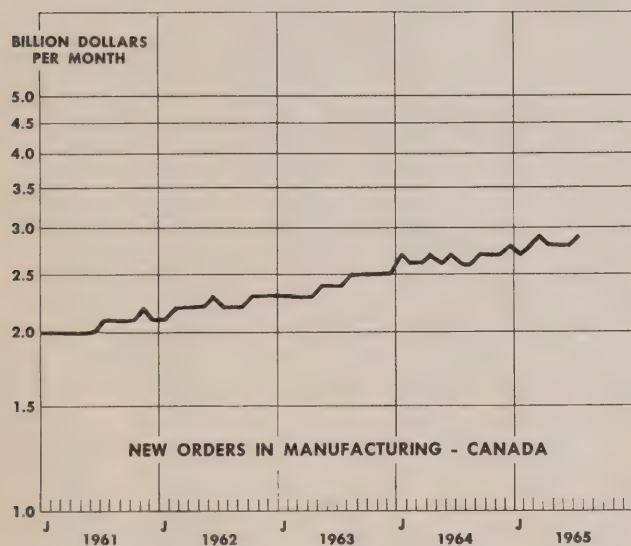
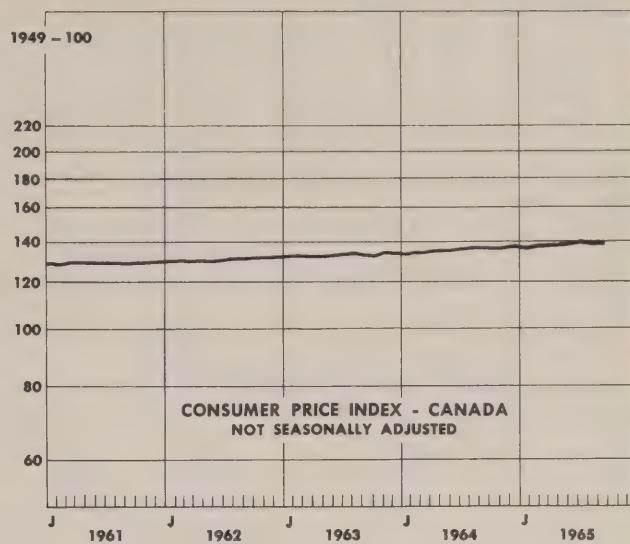
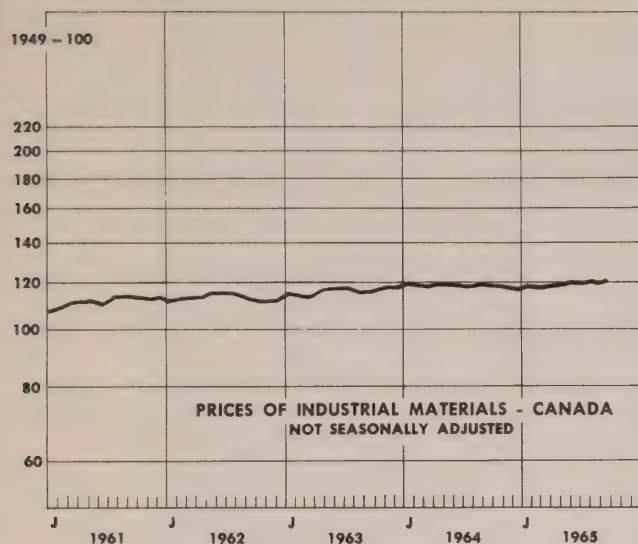
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



— TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



ONTARIO ECONOMIC INDICATORS - SEASONALLY ADJUSTED

(* Figures for Canada)

	1964-	August	September	October	November	December	January	February	March	April	May	June	July	August	September
LEADING INDICATORS															
Average Weekly Hours Worked in															
Manufacturing	41.2	41.2	41.4	40.8	41.1	41.0	40.3	41.7	41.5	41.0	41.3	41.3	41.3	41.3	41.3
New Dwelling Unit Starts	4,509	4,469	5,209	6,183	5,138	4,107	5,815	5,353	3,848	5,010	5,806	4,770	7,377	7,377	7,377
Business Failures	83	77	93	59	78	90	77	130	67	87	65	62	83	83	83
Business Failures - Liabilities	3.0	6.3	6.9	3.1	2.1	3.4	10.3	8.9	4.0	5.3	4.6	4.0	20.7	20.7	20.7
New Orders in Manufacturing (1)*	2,631	2,696	2,689	2,721	2,780	2,684	2,793	2,870	2,827	2,834	2,829	2,891	2,891	2,891	2,891
Housing Contracts	54.2	54.7	54.4	70.8	62.5	67.9	48.1	57.9	67.3	53.7	70.9	76.2	59.1	59.1	59.1
Business, Industrial and Engineering															
Contracts	90.0	76.9	86.1	83.1	117.9	113.5	80.3	143.9	109.3	117.9	135.9	127.8	115.0	115.0	115.0
Money Supply*	17,448	17,517	17,391	17,502	17,610	17,855	18,047	18,271	18,575	18,758	18,791	19,229	19,619	19,619	19,619
T.S.E. Index - 77 Stocks	160.4	169.1	169.7	168.5	165.6	170.9	172.8	170.7	171.1	169.5	163.0	163.9	166.8	166.8	166.8
COINCIDENTAL AND LAGGING INDICATORS															
New Dwelling Unit Completions	3,714	4,287	3,806	3,432	3,236	3,667	3,727	8,392	7,115	4,518	4,019	2,153	4,075	4,075	4,075
Average Hourly Earnings in															
Manufacturing	2.16	2.16	2.14	2.14	2.15	2.19	2.20	2.23	2.23	2.22	2.23				
Gross National Product*															
Cheques Cashied in Clearing	47,392	47,392	47,392	47,392	47,392	47,392	47,392	47,392	47,392	47,392	47,392	47,392	47,392	47,392	47,392
Centres															
Retail Trade	3,656	3,887	3,820	3,678	3,765	3,773	3,869	3,981	4,127	4,211	4,097	4,184	4,184	4,184	4,184
Labour Force	619	628	630	625	624	617	631	641	659	672	679	672	669	669	669
Employed	2,571	2,564	2,564	2,564	2,565	2,564	2,590	2,598	2,597	2,603	2,635	2,634	2,641	2,641	2,641
Unemployed	2,488	2,484	2,467	2,491	2,489	2,543	2,525	2,540	2,524	2,531	2,553	2,561	2,572	2,572	2,572
Unemployed as % of Labour	83	80	94	73	76	71	65	58	73	72	82	73	69	69	69
Force															
Wages and Salaries	3.2	3.1	3.7	2.8	3.0	2.7	2.5	2.2	2.8	2.8	3.1	2.8	2.6	2.6	2.6
Industrial Employment	792	804	798	806	808	825	823	843	849	854	861	868	868	868	868
Total Industrial Production*	134.1	134.7	133.6	136.1	136.8	137.9	138.2	139.3	139.8	140.1	140.2	140.4	140.4	140.4	140.4
Total Manufacturing	214.6	214.4	215.1	220.9	221.1	224.3	223.1	226.7	225.5	225.4	226.0	228.3	228.3	228.3	228.3
Non-Durables	190.8	190.2	189.1	194.5	194.4	197.2	195.9	199.4	198.2	200.3	200.3	202.9	202.9	202.9	202.9
Durables	184.4	185.0	187.1	191.0	192.7	191.4	189.8	188.9	189.3	193.2	190.9	193.7	193.7	193.7	193.7
Mining	198.3	196.3	191.4	198.6	196.4	203.9	203.1	211.8	208.6	208.5	211.4	213.6	213.6	213.6	213.6
Electric Power & Gas Utilities	318.9	315.3	326.7	341.2	338.1	348.3	343.3	347.5	348.7	332.7	336.9	339.5	339.5	339.5	339.5
Primary Energy Demand (Annual Rate)	403.7	416.1	426.9	421.8	434.1	429.6	437.4	441.8	435.8	431.8	433.5	431.7	431.7	431.7	431.7
Electric Power Demand (Annual Rate)	39.79	41.08	41.81	41.29	41.72	42.13	42.86	43.46	42.52	42.14	43.06	42.59	42.59	42.59	42.59
ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED															
Domestic Exports*	674.1	724.0	669.8	706.5	714.1	569.2	538.3	685.5	645.5	745.7	717.6	770.4	770.4	770.4	770.4
Imports for Consumption*	566.2	616.3	636.8	673.2	656.1	559.1	551.1	730.0	698.4	737.1	798.6	732.4	732.4	732.4	732.4
Foreign Exchange Reserves*	2,576	2,625	2,687	2,743	2,674	2,668	2,649	2,554	2,567	2,499	2,480	2,492	2,492	2,492	2,492
Prices, Industrial Materials*	259.9	258.8	258.0	258.5	256.2	256.7	255.3	256.3	256.6	258.5	260.4	259.5	259.5	259.5	259.5

(1) Revised Series

ONTARIO ECONOMIC REVIEW



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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

CONTENTS

The Ontario Economy	1
Concentration and Competition in Ontario's Fluid Milk Industry, <i>Duncan Allan</i>	3
Indicators and Charts	15

The Ontario Economic Review is prepared and edited monthly in the Economics Branch of the Department of Economics and Development and is available free of charge. The review is intended to provide current information on economic activity in Ontario and to act as a forum for the results of research in the public service on matters affecting the Ontario economy. The signed articles reflect the opinions of their authors and do not necessarily represent the views of the Economics Branch. All correspondence should be directed to the Editor, Ontario Economic Review, Economics Branch, Department of Economics and Development, 950 Yonge St., Toronto 5.

THE ONTARIO ECONOMY

As the Ontario economy went through its fifty-eighth month of expansion, there appeared to be no significant deterrent to continued expansion on the horizon. Construction contract awards, one of the significant indicators in Ontario, were recorded at \$177.2 million in November, 1.8 per cent higher than a year ago. Seasonally-adjusted data for October revealed a rise in housing contracts, and a significant decline in business, industrial and engineering contracts from the extremely high September level.

The seasonally-adjusted rate of unemployment declined from 2.7 per cent in September to 1.8 per cent in October, the lowest rate in Ontario since 1953. At the same time Canada's rate dropped to 3.2 per cent of the labour force.

Production

The expansion of industrial production continued in August, with the seasonally-adjusted Canadian Index of Industrial Production rising 1.3 per cent over the previous month's figure. At 231.4 (based on 1949 = 100), the August figure was 7.8 per cent higher than it had been one year ago.

The major contributors to this increase were mining and electric power and gas utilities, the former rising 3.2 per cent and the latter 4.2 per cent over the last month. Fuels led the way in the mining index, recording a one-month gain of 9.4 per cent. This included increases of 16.3 per cent, 9.6 per cent and 4.1 per cent in coal, petroleum and natural gas respectively. All major metals except gold declined over the month, resulting in a 3.9 per cent decline in the metals component of the mining index. Gold production rose 6.3 per cent.

The manufacturing index in August was 0.5 per cent higher than in July and 7.0 per cent higher than in August 1964. Durables and non-durables shared in the gain, rising 0.6 per cent and 0.4 per cent respectively. The bulk of the rise in durables, in terms of contribution, came from a 3.5 per cent gain in wood products and a 3.2 per cent increase

in electrical apparatus and supplies. Non-ferrous metal products declined 2.8 per cent, and non-metallic mineral products declined 1.8 per cent. Much of the gain in non-durables was due to increased textile production, particularly the 6.2 per cent rise in synthetic textiles and silk.

Motor vehicle production in October was 72,590 units, including 60,158 cars and 12,432 trucks. Approximately one of every five cars produced that month was destined for export. The production figures were considerably in excess of October 1964 — over 75 per cent higher — due to last year's General Motors strike in the United States and the related lay-off in Canada.

Following a month of lower production, steel ingot production in October rose by 6.6 per cent to a level of 864 thousand tons. This was 11.0 per cent higher than the 778 thousand tons produced in October 1964. Comparing ten-month periods for this year and last year, there has been a substantial increase of 10.5 per cent in production.

Manufacturing shipments in Ontario, unadjusted for seasonal variation, were \$1,286.8 million in August, 10.4 per cent higher than August of last year.

Construction

Construction activity continued to exert its stimulating effect on the Ontario economy in November. During that month construction contract awards totalled \$177.2 million, an increase of 1.9 per cent over November 1964. At the same time this brought the cumulative eleven-month total for 1965 to \$2,007.5 million, 20.9 per cent higher than the corresponding eleven-month period last year.

In terms of value, Ontario accounted for over 64 per cent of all larger construction contract awards placed recently in Canada. Such awards are each valued at \$1 million or more. Some of the awards included in Ontario's approximate total of \$71.1 million are listed in the following table.

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ Million</i>	<i>Description</i>
Brampton	1.2	Housing
Burlington	1.8	Apartment
Cornwall	3.0	Chemical plant
Etobicoke	3.5	High school
Fort Erie	1.6	Hospital addition
Hamilton	1.3	Apartments
Hoyle Twp.	1.0	Ore concentrator
London	1.8	Hospital addition
Moore Twp.	1.0	Plant
North Bay	1.5	Department store
Ottawa	1.4	Bridge
Peterborough	6.0	Apartments
St. Catharines	1.5	Office building
Scarborough	4.0	Shopping centre
Toronto (Metro)	20.8	Apartments
Woodstock	2.0	Factory
Various locations	3.4	Welland Canal improvements

The seasonally-adjusted value of business, industrial and engineering contracts in October, at \$98.1 million, was down 37.0 per cent from the very high level of \$155.7 million recorded in September. Nevertheless this represented a gain of 13.9 per cent over October 1964. Housing contracts, on the other hand, rose over the last month, to achieve a value of \$56.6 million in October. This was 27.8 per cent higher than the relatively low value of \$44.3 million for the month of September, but only 4.0 per cent higher than October 1964.

The seasonally-adjusted data further reveal that in September there was a substantial decline in new dwelling unit starts. This decline of 39.5 per cent points out not so much the limited number of starts in September — recorded at 4,465 — as it does the exceedingly high August figure of 7,377 starts. However, the September figure shows almost no change in dwelling unit starts from one year ago. New dwelling unit completions also declined, but not as sharply. Completions fell from 4,075 in August to 3,269 in September — a reduction of 19.8 per cent.

Employment

The most outstanding feature of the Ontario economy during the month of October was the achievement of the lowest rate of unemployment in thirteen years. Seasonally adjusted, the number of unemployed was 47 thousand, or 1.8 per cent of the labour force. Not since 1953 have labour resources been as fully utilized.

In terms of the change from the previous month,

the size of the labour force declined from 2,600 thousand in September to 2,586 thousand in October, a reduction of 14 thousand. The number employed, however, rose from 2,531 thousand to 2,539 thousand. Unemployment thus dropped from 69 thousand to 47 thousand, with the unemployment rate falling from 2.7 per cent in September to 1.8 per cent in October.

Canada too enjoyed the lowest rate of unemployment in many years. Out of a total labour force of 7,108 thousand there were 224 thousand unemployed — a rate of 3.2 per cent. This rate, having declined from 3.6 per cent in September, was lower than at any time since November 1956, when it was 3.0 per cent.

On the basis of the average seasonally-adjusted statistics for the ten-month period this year, Ontario's labour force has numbered 2,610 thousand and the rate of unemployment has been 2.6 per cent. Canada, with the labour force averaging 7,122 thousand, has had an average rate of unemployment of 4.0 per cent.

Exports

Canadian exports in August were valued at \$685.7 million, according to the Dominion Bureau of Statistics. This surpassed the August 1964 value by \$11.6 million. Over 45 per cent of the total exports were inedible fabricated materials, of which about one-half were products of the forest. The second-largest major group, inedible crude materials, represented 23.3 per cent of total exports in August. Of the \$160.0 million accounted for by this group, \$46.8 million were iron ores and concentrates, \$23.3 million crude petroleum, \$12.7 million nickel in ores, concentrates and scrap, and \$12.5 million unmanufactured asbestos. Food, feed, beverages and tobacco, at \$123.3 million in August, were the next-largest group, with wheat exports valued at \$63.9 million by far the most significant contributor.

Inedible end products, making up 12.2 per cent of all exports in August, reflect the extent to which Canada sells fully manufactured non-food products. Of their total value of \$83.9 million, \$18.2 million were aircraft and parts, \$11.9 million motor vehicles and parts and \$11.9 agricultural equipment.

On an eight-month basis, total exports rose by 1.5 per cent to \$5,357.3 million from 1964 to 1965. Inedible end products, valued at \$826.5 million, were up 16.1 per cent, largely due to the expansion of motor vehicles and parts exports. These rose by 83.9 per cent, from \$98.8 million in the eight-month period of 1964 to \$181.7 million in that period in 1965.

In terms of distribution by destination, the United States accounted for 57.8 per cent of our exports and the United Kingdom 14.4 per cent. Japan and Germany followed with 3.7 per cent and 2.1 per cent respectively.

Finance

The supply of loanable funds in all sectors of the Canadian money market, having remained relatively limited in recent months, increased slightly during October. Reflecting this condition, the day-to-day loan rate was generally quoted in a 3¼ per cent - 3⅞ per cent range throughout this period; this represented a ⅛ to ¼ of 1 per cent decline for the month.

Light trading volume and minor downward price adjustments characterized activity on outstanding issues on the Canadian bond market in October. Short-term issues were off 10 to 15 cents over the month while longer-termed maturities registered losses averaging 25 cents. Contributing to this easier tone was a prevailing sentiment of apathy as the market awaited an impending heavy schedule of new floatations, particularly a sizable Government of Canada refunding issue. By the end of October new

Canadian bond financings totalled \$3.18 billion, an increase of no less than 25.2 per cent over last year's comparable total of \$2.54 billion.

Investment quality industrial equities listed on the Canadian stock exchanges, on the merits of additional increases in corporate earnings, continued to be in good demand throughout most of the month. Price changes, while widespread, were nevertheless confined to a narrow range. As measured by the Toronto Stock Exchange Industrial Index, prices advanced relatively steadily, closing October at a month high of 170.04 for a 2.52 point gain on Index over the month.

Canada's official holdings of gold and U.S. dollars again increased in October and at month-end totalled US \$2,643.8 million. The net increase over the month amounted to slightly less than US \$30 million.

In terms of U.S. funds, the value of the Canadian dollar appreciated slightly during October. Strength was evident throughout the month as its value rose from an opening level of US 92.92 cents to a closing level high of US 93.06 cents.

CONCENTRATION AND COMPETITION IN ONTARIO'S FLUID MILK INDUSTRY

DUNCAN ALLAN

Economist, Financial Research Branch

ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Processing and distribution of fluid milk and cream has for many years been a leading manufacturing activity in Ontario. Throughout the last two decades this important industry has undergone rapid and fundamental changes. This study focuses on two of these post-war developments in Ontario's fluid milk industry, namely, the trend toward increased concentration, and the revival of competition. As a background to the discussion of these two main themes, we have outlined the basic characteristics and essential dimensions of the fluid milk trade in this province. The study concludes by drawing together the main findings and appraising their significance for the future.

ESSENTIAL BACKGROUND

Before proceeding with an analysis of concentration and competitive conditions in the Ontario fluid milk industry, it is important to have an understanding of the industry's basic structure and characteristics and an awareness of the fundamental changes occurring within it. Such a background involves

some comment on the size of the industry and its growth pattern, the number and size of dealers, the nature of demand, the methods of distribution, the impact of technological changes and the pervasive influence of government. These matters are considered in this section of the paper.

Definition of the Industry

At the outset it is essential to clearly lay out the perimeter of the industry with which we are dealing. Accordingly, the Ontario fluid milk industry is defined as consisting of *all establishments in Ontario engaged in pasteurizing and distributing fluid milk and/or fluid milk products.*⁽¹⁾ Substantially this means all dairies in Ontario that pasteurize, bottle and sell fresh milk, cream, buttermilk and chocolate drink. This concept of the industry corresponds

⁽¹⁾ This definition differs somewhat from the D.B.S. concept of "pasteurizing plants" or the U.S. Census definition of the fluid milk industry, although all three cover essentially the same activities. The D.B.S. and the U.S. Census industry designations include *all* products handled by establishments whose *main activity* is pasteurizing and distributing fluid milk and cream.

closely to the universe of plants and products coming under the supervision and jurisdiction of the Ontario government's regulatory agency — the Ontario Milk Commission.

Size and Growth of the Industry

Annual sales of the Ontario fluid milk industry presently amount to about \$200 million while employment stands at nine to ten thousand.⁽²⁾ In terms of value of factory shipments the fluid milk trade ranks among the twenty leading manufacturing industries in Ontario. It compares in size with the combined breweries and distilleries industries in this province.

Over the last two decades the industry has grown slowly as compared to the growth performance of Ontario manufacturing generally. In volume terms fluid milk sales in Ontario increased by 41 per cent between 1945 and 1961, while the population grew by 55 per cent. (See Table I, page 12.) In the United States the long-term growth trend of the fluid milk industry has been similarly static.⁽³⁾

Fluid milk and fluid milk products are distributed in every community in the province, but the large cities account for the great bulk of sales. Some 60 per cent of fluid milk sales and over three-quarters of all cream sales are in the "Golden Horseshoe" plus Windsor, London and Ottawa, and it is in these centres that the large distributors are located. Practically all fresh milk consumption is now supplied by commercial dairies, though 20 years ago about one-quarter of all fluid milk was consumed in raw form on the farm.

Number and Size of Distributors

At the present time there are some 380 to 400 fluid milk distributors or licensed commercial dairies in Ontario.⁽⁴⁾ In 1946 some 630 distributors served a considerably smaller market. Over the last two decades, therefore, there has been a drastic reduction in the number of establishments in the industry and a substantial increase in their average size. This trend to fewer but larger units may be attributed to numerous factors, including technological advances in processing, improvements in transportation and refrigeration, changes in methods and channels of distribution, and the merger activity of recent years, all of which are discussed later in the paper. One other factor which undoubtedly has been important is the existence of substantial economies of scale in the milk distribution industry.

In the business of pasteurizing, bottling and distributing milk, fixed costs are a relatively high proportion of total costs, hence there is a constant

pressure to expand output and spread these fixed costs over a larger volume. As the table below indicates, larger plants generally are able to achieve lower unit costs than smaller plants because they are able to obtain higher output per hour of labour and per dollar of investment.

Relation of Plant Size to Capital Requirements and Cost per Unit in Fluid Processing Plants

<i>Capacity of Plant (quarts daily)</i>	<i>Investment per quart of daily capacity</i>	<i>Total Costs per quart⁽¹⁾</i>
6,000	\$24	\$.057
20,000	11	.039
50,000	8	.032
100,000	7	.029

⁽¹⁾ Reflects all costs, including containers.

Source: F. C. Webster and others, *Economics of Size in Fluid Milk Processing Plants*, Vermont Agricultural Experimental Station Bulletin No. 636, June 1963, pages 5 and 8.

Similarly in the delivery operation a high volume per route means lower costs per unit, particularly if deliveries are made in large drops, such as to supermarkets.⁽⁵⁾ These economies of scale in both processing and distribution have proven a strong impetus to the expansion of dairies, both by internal growth and by means of mergers.

Of the large number of distributing firms in Ontario only three — Borden, Silverwood and Dominion Dairies — operate more than one or perhaps two plants.⁽⁶⁾ These multiplant firms had their origin

⁽²⁾ There are no precise sales or employment figures which correspond to our industry definition. The D.B.S. data on "milk pasteurizing plants" however, may be used as approximations of these magnitudes. In 1961 the 373 establishments in Ontario which made up the milk pasteurizing plants industry employed 9,931 persons and had a total selling value of factory shipments of \$178.2 million. (See D.B.S. publication #31-206 *Manufacturing Industries of Canada, Section D*, 1961, page 17).

⁽³⁾ A recent publication by the U.S. Dept. of Commerce, *Growth and Labor Characteristics of Manufacturing Industries*, classifies the long term growth trend of the fluid milk industry as static, (i.e. the 1962/1947 ratio of value added was less than 75 per cent of the average ratio for all manufacturing).

⁽⁴⁾ The range of 380 to 400 is an estimate by the author. The Ontario Department of Agriculture reported 406 regular distributor licenses issued in 1964, but in several instances a single distributor holds more than one license. D.B.S. shows 353 pasteurizing plants in Ontario for 1962, but this count excludes all those plants which distribute milk as a secondary activity to ice cream manufacturing or some other principal activity.

⁽⁵⁾ Most deliverymen work on a basic salary plus a commission on sales, hence the larger the route's sales the lower the basic salary per unit sold.

⁽⁶⁾ Silverwood distributes in 15 markets, Borden in seven and Dominion Dairies in five. Silverwood Dairies Ltd. is a Canadian-owned company while Borden Company Ltd. and Dominion Dairies Ltd. are wholly-owned subsidiaries of the two giant U.S. dairy processing concerns — The Borden Company, and National Dairy Products Inc., respectively.

in the 1920's when transport costs made it necessary for a firm to establish a dairy in each community in which it sold its products. Today there is an opposite trend, i.e. a movement toward centralization of processing and a widening of the radius of distribution around each plant. For example, Silverwood has recently shut down its processing plants in Chatham and Stratford and is supplying these markets from Windsor and Kitchener respectively. Similarly, Dominion Dairies has for the past several years supplied its Hamilton and Pembroke branches from Toronto and Ottawa. This would seem to indicate that any strong advantages multiplant firms may have enjoyed in the past have largely evaporated.⁽⁷⁾

Demand for Milk

Because of its nutritive qualities, milk is commonly regarded as a vital food, particularly for infants and children. This conviction that milk is a necessity plus the fact that there are no adequate substitutes for it means that price changes have little effect on consumption.⁽⁸⁾ In other words, the demand curve for the industry as a whole is inelastic. Up to recently the same thing could be said of the demand curve of individual markets, because high transport costs effectively prohibited the movement of milk from one community to another.

The demand curve faced by individual distributors, on the other hand, is very elastic. Customers will rapidly shift from one distributor or outlet to another if there is any significant price incentive to do so. This reflects the simple homogeneous character of the product and the ready access by consumers to alternative sources of supply. The pricing behaviour and trade practices of the distributors in a market, therefore, tend toward uniformity.

Major Technological and Market Changes

Since World War II there has been a technological and merchandising revolution in the fluid milk industry. Innovations in transportation, processing, packaging and distribution of milk have disrupted the traditional patterns of behaviour in the industry and created serious problems of adjustment for many dealers.

Improvement in transportation facilities caused major changes in the industry. The replacement of horses and wagons by trucks, and the use of refrigerated transport were two important developments that reduced the technical and cost barriers of transportation. These improvements tended to extend the range of delivery vehicles, broaden the potential market which a distributor could serve,

and open up isolated markets to outside competition; these pressures in turn squeezed out of the industry many small dairies and those that failed to keep abreast.

In processing, innovations have been mainly in the direction of increasing the speed or flow of milk through a plant and perfecting the various control mechanisms necessary at certain stages in the production cycle. Some specific advances include: the use of electronic rather than manual controls, the change from batch pasteurization to the high-temperature short-time method, in-place cleaning, automatic casing and stacking, and the application of computers to handle payrolls, billings, inventory control, etc. This new technology has tended to favour large plants since it has increased the capitalization and scale of operation necessary to utilize effectively even the minimum combination of inputs. G.L. White made this point in a paper he presented at the 1962 Workshop of the Canadian Agricultural Economics Society:

"A modern fluid processing plant may be operated from a central panel with very little additional supervision, but the capital expenditure involved for such a high degree of automation can only be justified where fairly large volumes of milk are processed."

One researcher, Dr. P. H. Tracy, Department of Food Technology, University of Illinois, has estimated that a modern fluid plant must have a volume of at least 30,000 quarts a day to make effective use of the latest technology.

In the area of packaging there has been a great diversification in the sizes and types of containers available to consumers. Whereas the one-quart glass container was practically the universal package after the war, today milk is sold in glass, paper, and plastic containers in a variety of sizes from one quart to eight quarts. The three-quart bottle, pioneered by jug store outlets, and the two-quart paper package sold in supermarkets have proven particularly popular.

⁽⁷⁾ Because of their geographic diversification multiplant firms such as the "Big Three" probably enjoy some advantage over purely local distributors when competing for the milk business of large supermarket chains.

⁽⁸⁾ The elasticity of demand for milk (retail) has been estimated by various researchers as somewhere in the neighbourhood of one-half. A. S. Rojko calculated an elasticity ranging from one-fifth to one-half but stressed the importance of the time dimension in making such an estimate. He argued that while price increases may not engender any immediate shift or reduction in milk purchases the long-run reaction by consumers might be quite different. (See pp. 109-110 *The Demand and Price Structure for Dairy Products*, U.S. Department of Agriculture Technical Bulletin No. 1168, 1957.)

The last two decades have also witnessed the appearance of new products, while some older ones have gradually passed into oblivion. In the latter category are special milk and cream top milk, while 2% and skim are the major newcomers. Differentiation of milk along breed lines (e.g. Golden Guernsey, 2% A-J, Ayrshire Extra) has also been tried and is enjoying considerable success.

The distribution side of the milk industry has undergone a radical transformation during the last 20 years. The traditional system of door-to-door delivery has steadily given way to distribution through supermarkets, jug stores and vending machines. Institutional outlets such as restaurants and hotels have likewise increased in importance. Perhaps 50 per cent of all milk now sold in Ontario reaches consumers through these indirect channels (i.e. about one-half of all sales by distributors are now of a wholesale rather than retail nature). This shift from direct retailing to wholesale selling has created important problems of adjustment for many dairies, particularly small dairies. In the past, smaller firms were able to concentrate on carving out a slice of the home delivery business; as this business declines their chances of survival grow slimmer.⁽⁹⁾ The trend to wholesale distribution has also had repercussions for the large distributors, as it has pitted them against supermarkets and other large volume buyers who enjoy a strong bargaining position.

Government Supervision of the Fluid Milk Trade

Since 1934 the Ontario government has been deeply involved in all aspects of the fluid milk industry, from primary production to final retailing. At the distributor level the government, through its quasi-judicial Milk Board, has played the role of policeman and watchdog and has exerted a powerful influence on prices, trade practices, conditions of entry, indeed the whole competitive environment, or lack of it, in the industry.

From 1934 to 1948 the Board set prices to consumers and to producers directly, thereby forcing distributors to operate at specified margins. After the scathing criticisms of this retail price control by Justice Wells in 1947, it was abandoned, only to be replaced in 1951 by a system of formula pricing.

Licensing has been a major instrument of government control and supervision over the industry. The Board (and its successor, the Milk Commission of Ontario) has the power to prevent any operator

from participating in the fluid milk trade in Ontario simply by refusing to grant him a licence. Through its licensing policy the Board has promoted a reduction in the number of existing distributors, and has discouraged new firms from entering the trade. By prescribing specific territories or distribution areas on its licences, moreover, the Board has effectively insulated individual markets and individual dairies from outside competition, and curbed potential expansion by certain aggressive firms.⁽¹⁰⁾ These artificial restrictions have mitigated against the drive for more efficient handling and distribution of fluid milk. Multiplant firms, for example, have been forced to continue operating branches in small centres, rather than serving these centres from outside, in order to protect their licensing privilege in such centres. Much the same result has been achieved in smaller centres such as Oakville, Cobourg and Trenton by the enactment of municipal by-laws to protect the local dairies from out-of-town competition.

MERGERS AND CONCENTRATION IN THE INDUSTRY

Of the many changes noted in the preceding section, none has been more obvious or significant than the steady decline in number and growth in size of Ontario dairies. Since World War II the number of distributors serving Ontario communities has shrunk by over 230, or more than one-third. In the Toronto market the reduction has been more drastic, from 54 dairies in 1946 to 17 today. During the last 20 years many established firms have disappeared by way of merger or consolidation with other dairies, most of the surviving firms have expanded considerably, and only a handful of new firms have entered the fluid milk trade in Ontario. This tightening structure of the industry would seem to imply an increase in concentration, i.e. an increase in the market share or control in the hands of the largest firms. This matter of the degree and the direction of concentration in the industry is considered below.

Concentration in 1961

In 1961 the three large chain dairy organizations — Silverwood, Borden and Dominion Dairies — ac-

⁽⁹⁾ In its 1964 annual statement, Silverwood reported a two per cent decline in retail sales and a 15 per cent gain in wholesale sales.

⁽¹⁰⁾ Section 29 of the Act empowers the Board to "issue to a distributor a license to sell or distribute fluid milk products in any designated area or part thereof . . ." and distributors are prohibited from doing business in any other area.

counted for 34 to 35 per cent of all sales of fluid milk and fluid milk products in Ontario. The combined market share or penetration of the "Big Three" was 34 per cent for all fluid milk, 42 per cent for all types of cream, 42 per cent for buttermilk and 32 per cent for chocolate drink. This concentration of industry sales in the hands of only three out of some hundreds of distributors is all the more significant when we recall that the "Big Three" operate in only 17 markets in the province. In those communities where two or all three firms distribute, the combined "Big Three" sales amount to from one-half to three-quarters of the total sales in the market.

Following in the wake of the "Big Three" in Ontario are some very substantial and aggressive independents. In 1961 seven such independents rang up over 10 per cent of all fluid milk sales, while these seven plus five other sizable distributors accounted for some 15 per cent of all sales. In total then, the 15 largest distributors sold over half of all the fluid milk and fluid milk products in Ontario in 1961. These concentration ratios which are developed in full detail in Table II on page 13 are summarized below.

*Percentage of 1961 Total Industry Sales
(by Volume)*

	The "Big Three"	The "Big Three" plus 7 Large Independents ⁽¹⁾	The "Big Three" plus 12 Large Independents ⁽²⁾
Fluid Milk	34	44	49
Cream	42	54	N/A
Buttermilk	42	54	N/A
Chocolate Drink	32	43	N/A
All fluid milk and fluid milk products	34-35	45-46	over 50

⁽¹⁾ The seven large independents are: London Pure Milk (London); Purity (Windsor and Chatham); Royal Oak (Hamilton); Donlands (Toronto); Becker (Toronto); Maple Lane (Kitchener); and Clark (Ottawa).

⁽²⁾ The other five independents are: Valley View (Toronto); Royal (Guelph); Oshawa Dairy (Oshawa); Westside (Kitchener); and Lakeview (Barrie).

It is interesting to compare the degree of concentration in the Ontario industry with that in other jurisdictions. Unfortunately, it was impossible to secure figures on concentration in other provinces; there is reason to believe, however, that the fluid milk industry in Ontario is less concentrated than that in any other province, except perhaps Quebec.⁽¹¹⁾ Comparisons with the United States are difficult because of differences in the sizes of the industries to which the concentration ratios apply. On a national scale, the four largest dairies in the United

States accounted for 23 per cent of fluid sales in 1958, while the eight largest accounted for 29 per cent. On the smaller scale of Federal order markets, concentration in the United States is of course considerably higher. The five largest Federal order markets — those with sales in excess of 60 million lbs. per month or roughly one-third to one-half of Ontario's sales volume — had an average concentration of 46.7 per cent in March 1962. That is, the four largest handlers (distributors) in these five Federal order markets accounted, on the average, for 47 per cent of the dollar sales in the total market. These American figures indicate at least some sort of parallel or similarity between the fluid milk industry in Ontario and its counterparts in the United States.

Increased Concentration Since 1945

The only reliable estimates of concentration in the Ontario fluid milk industry in the past were those contained in the Wells Report published in 1947.⁽¹²⁾ That report estimated the degree of concentration in the Ontario fluid milk industry in 1945 as follows:

*Percentage of 1945 Total Industry Sales
(by Value)*

	The "Big Three"	The "Big Three" plus 55 Independents
Fluid Milk and Cream	30	N/A
Chocolate Drink	30	N/A
All other products (ice cream, butter, etc.)	53	N/A
All dairy products	39	57

Obviously, the industry definition and method of measurement used by Justice Wells were somewhat different from those adopted in this paper. Nevertheless, the 1945 concentration figures for fluid milk, cream and chocolate drink can reasonably be compared with those for 1961. And comparison of the two sets of data reveals an increase in market concentration over the period, both by the "Big Three" and by the large independents. Between 1945 and

⁽¹¹⁾ In the first place, Ontario has over half of all the distributors in Canada. Secondly, other provinces have large cooperative milk distributors such as F.V.M.P.A. in B.C., Farmers Ltd. in Nova Scotia, and Saskatchewan Co-op Creamery Assoc. in Saskatchewan, as well as large chain dairy organizations such as Modern Dairies and Palm Dairies in the West, Sussex Cheese and Butter Co. Ltd. in New Brunswick, Leo Lacteries Leclerc and La Ferme St. Laurent Lté. in Quebec.

⁽¹²⁾ This is the popular title of the report of the *Ontario Royal Commission on Milk*, 1947.

1961 the "Big Three" increased their combined share of Ontario fluid milk sales from 30 per cent to 35 per cent. Over the same period the number of independents needed to account for 15 per cent to 20 per cent of total sales dropped from 55 to about a dozen.

As between different products, the largest increase in concentration was in cream and the smallest increase in chocolate drink. Between 1945 and 1961 the "Big Three" raised their market penetration in cream from 30 per cent to 42 per cent; this indicates an increased occupancy by the "Big Three" in the major markets and a stronger position in the wholesale end of the business. The relatively minor change in the proportion of chocolate drink sales in the hands of the "Big Three" (from 30 per cent in 1945 to 32 per cent in 1961) was due to the relative unattractiveness of this portion of the business to the big companies.

The increase in concentration during the post-war period may be attributed to two main causes: the shift in consumer demand from standard milk to 2% and skim milk, and the substantial merger activity in the industry. The effect of demand shifts upon concentration is discussed below, while mergers are treated in the following section.

Skim milk and partly skimmed milk (2%) were introduced in the Ontario market around 1952 and 1956 respectively, and both immediately caught on as substitutes for regular homo milk (see chart below).

*Trends in Volume of Sales
of Skim Milk and 2% Milk*

<i>Skim Sales (1952 = 100)</i>		<i>2% Sales (Nov. 1956 = 100)</i>	
1953	114	Mar. 1957	165
1955	151	Mar. 1960	652
1957	191	Mar. 1961	691
1959	200	Mar. 1962	893
1960	201	Mar. 1963	1,041
1961	200	Dec. 1964	1,440
1964	203		

Large dairies not only led the way in introducing these new types of fluid milk, but also promoted them vigorously because of certain side advantages.⁽¹³⁾ Small distributors, on the other hand, have been at a disadvantage because they lack the equipment to process 2% or skim milk, and do not produce the secondary products (butter, ice cream, cottage cheese) necessary for effective utilization of the surplus butterfat. As a result, 2% sales and skim sales have always been more or less the preserve of the larger distributors. The tremendous increase in

popularity of 2% and to a lesser extent of skim milk, therefore, has inevitably resulted in a larger share of total fluid milk sales falling into the hands of large distributors, particularly the "Big Three".

The History of Mergers

Since World War II, several hundred milk distributors have disappeared from the Ontario industry. Table III, on page 14 at the end of this study, records 93 such instances where Ontario distributors have gone out of business since 1945. This record, though incomplete, indicates that most of the dairies that disappeared were purchased by other distributors, while a handful joined together with a competitor to form a larger, stronger unit. Bankruptcies, on the other hand, were rare; only four cases are recorded in the *Canadian Dairy and Ice Cream Journal* — in 1948, 1952, 1953, and 1963.

Generally when a distributor purchased or absorbed another dairy, the new owner closed down the plant of the defunct operator, after transferring or disposing of the processing equipment. In a few exceptional cases, no physical assets were included in the buying-selling transaction.

The "Big Three" have been active participants in the merger movement since 1945; these three companies were involved in 26 out of the 97 cases mentioned above. The major acquisitions of Dominion Dairies since 1945 were Sani-Sealed Dairies (Toronto) in 1952, London City Dairies in 1955, Fairfield Modern Dairy (Hamilton) in 1955, and Roselawn Farms Dairy (Toronto) in 1962. During the same period Borden acquired control of seven distributors, including: Robb-Brown Dairies and Wilson Dairies (London) in 1956, Gold Seal Dairies (London) in 1959, Terrace Hill Dairy (Brantford) in 1959 and Rainbow Dairies (Niagara Peninsula) in 1964. Silverwood has taken over 12 distributors since the war, six of which were relatively large operations.⁽¹⁴⁾ Several of the large independents also have added substantially to their sales volume by acquiring existing distributors, though generally of smaller size than those absorbed by the "Big Three".⁽¹⁵⁾

⁽¹³⁾ For many years distributors paid producers 34¢ a pound for milk fat in raw milk, while the market value for this fat (in the form of butter or ice cream or fresh cream) was 50¢ or more per pound. Hence a distributor could realize an "extra" profit by selling 2% milk and converting the extra fat into butter.

⁽¹⁴⁾ These six were: Hamilton Springbank Dairy in 1948; Walnut Dairy (Toronto) in 1956; Johnson-Hill Dairy (London) and Lakeshore Dairy (Toronto) in 1960; Paulger's-Blantyre Dairy (Toronto) in 1961; Mason's Dairy (St. Catharines) in 1962.

⁽¹⁵⁾ In the United States the Federal Trade Commission has barred further mergers by the four largest dairy corporations (see *Business Week*, May 22, 1965).

The mere occurrence of the mergers noted above cannot be construed as necessarily contributing to increased concentration in the industry. But taken in conjunction with other considerations such as the paucity of new entrants, the stable mortality rate, and the lack of any obvious reasons for slower growth by the "Big Three" than by other distributors, this history of mergers seems to have been an important cause of the increased concentration in the Ontario fluid milk industry.

There are several reasons why milk distributors find it advantageous to expand by way of merger: to exploit scale economies; to get access to protected distribution areas; to increase market share without adding to the capacity in the industry; or to gain a foothold in new markets. Of the 93 mergers recorded in Table III, six were clear cases of one distributor buying out another as a means of expanding into a new market. In those cases where the routes and facilities of the purchased dairy were assimilated into the buyer's operation, exploitation of scale economies to achieve lower costs was probably the ultimate rationale for the merger. From the viewpoint of the distributors that disappear there is also an advantage in doing so by way of merger. To the distributor in financial difficulty, absorption by another firm provides the chance to dispose of the business as a going concern and thereby realize a better price for the goodwill portion of the assets.

The Present Position of the "Big Three"

In 1947 Justice Wells made the following observation on the significance of the "Big Three" in the Ontario fluid milk industry:

"These three companies unquestionably exercise a large influence in the industry in Ontario, not only because of the efficiency of their methods and the high quality of their products, but because of the lead which they give independent concerns which operate in a similar fashion."

In addition he noted that the "Big Three" controlled 30 per cent of the market for fluid milk, chocolate drink and cream in 1945. As we have seen this "Big Three" share climbed to some 35 per cent by 1961. Today it may be closer to 40 per cent of total industry sales.

This postulation that the "Big Three" market share has risen considerably since 1961 is supported by two observations. First, there has been an intensification of merger activity in general since 1961 and

the "Big Three" have played a leading role in this activity. Five large independents have been absorbed by the "Big Three" subsequent to our 1961 measure of concentration (Paulger's-Blantyre, Terrace Hill, Mason's, Roselawn Farms, and Rainbow); only three of the largest independents, on the other hand, have purchased additional sales volume since 1961. Second, and perhaps equally important, has been the tremendous expansion in 2% sales since 1961, as opposed to an actual decline in standard milk sales. This shift in the product mix of the industry has almost certainly boosted the sales of the larger dairies such as the "Big Three" relative to the sales of distributors handling only the regular line of milk.

The present 35 to 40 per cent control of industry-wide sales by the three large chain dairy organizations considerably understates their actual or potential economic power in particular markets. In each of the five major markets except Toronto, the "Big Three" along with a single independent virtually overwhelm other distributors. In Toronto, four aggressive independents — Becker, Donlands, Valley View and Findlay-Kemp, have prevented the "Big Three" market share from climbing above 60 per cent. The overall trend, however, is clearly in the direction of greater concentration of sales and control of the fluid milk industry in the hands of a few giant firms.

COMPETITION IN THE FLUID MILK INDUSTRY

The second major interest of this study has to do with the degree and type of competition that prevails in the Ontario fluid milk industry, and the changing dimension and character of such competition in recent years. Under this general subject area will be discussion on: the interdependence of distributors in pricing; the absence of price competition prior to 1948; interfirm price competition within individual markets and between markets; the effect of concentration on competition; and the threat of competitive abuses and practices requiring action by the combines authorities.

Interdependence of Distributors in Pricing

In our earlier discussion of the nature of demand for fluid milk, it was noted that the pricing behaviour and trade practices of distributors in a market tend to be identical or uniform. The basic reason for this uniformity in behaviour is the high

degree of interdependence among distributors, due to:

- (a) the limited number of firms in each market;
- (b) the homogeneous nature of the product, which means that consumers will readily shift from one distributor to another;
- (c) the inelastic demand curve in a market;
- (d) the identical buying price or cost to distributors for their raw milk requirements.

Under these conditions, a price reduction by any distributor in a market will in all probability be met by the others, and conversely, any single firm will be reluctant to raise prices for fear that his competitors won't follow. In essence this means that the collective body of distributors in any given market finds it in its best interests to practise restraint or discipline in the matter of pricing. This predisposition towards a "live and let live" policy in pricing and the tranquility it implies is often spoken of and praised as market stability or orderly marketing.

The interdependence and essential unity of interests of distributors in Ontario are reflected in their highly effective trade organization — the Ontario Milk Distributors Association. Under the OMDA, distributors have come together in each market to present a united front in bargaining with producers and with unions. The OMDA has also acted to bring about simultaneous retail price increases across the province whenever the government-sponsored pricing formula has indicated an increase in producer prices. In recent years there has been some evidence of a schism developing with the OMDA, with the small distributors lined up on one side and the large dairies on the other.⁽¹⁶⁾

The Tradition of Controlled Competition

In 1934 the Ontario government stepped in to regulate and supervise the fluid milk industry. Producer prices and retail prices were fixed, entry was limited, trade practices were rigidly controlled, and strict sanitary requirements were imposed by the government's control agency, the Milk Board. Price competition simply was not allowed to exist. Distributors vied for customers solely on the basis of service, advertising and locational advantage. Justice Wells succinctly described the competitive situation in the industry in 1947 in these words: "very little competition exists between distributors . . ."

In 1948 some vigour was restored to the industry by relaxing the direct control of retail prices. At that time the Milk Board was sufficiently wary of the potential for collusion among distributors that

it held on to the power to impose maximum retail prices — a power which it retains to this day. Despite the strong distributor predisposition to avoid price competition, and despite a solid tradition of identical pricing, however, decontrol was rapidly followed by a revival of price competition in the industry.

Intramarket and Intermarket Competition Among Distributors

In contrast to 1947, a recent investigation of the Ontario milk industry found that "the competition among milk distributors in Ontario has been vigorous in recent years and is likely to increase in the immediate future."⁽¹⁷⁾ Many factors have played a part in this revival of competition in the industry; we shall deal with only the most fundamental and important of them here.

The present evidence of competition in the industry is not restricted to the behaviour of firms within particular markets. For, in the last few years there has been considerable intermarket activity by distributors. This dimension to competition is fundamentally new, and has important ramifications for an industry which has for so long been organized into isolated, sheltered local markets. The major factors leading to intermarket competition have been technological in nature — improvements in transportation and refrigeration — but other factors such as the supermarket revolution in retailing and the development of paper packaging for milk were also important. These changes have made it possible for large dairies, like those in Toronto, to ship milk over a radius of 100 miles and compete with local distributors within this distance for the wholesale business. Such intermarket movement of milk, or the potential for it, has provided both a direct and a psychological stimulus to competition in the industry.

Competition between firms within individual milk markets has also been greatly intensified over the last decade. The introduction of new channels and methods of distribution, and the shift to wholesale selling have been the major causes of this increased competition between firms. There is still practically not price competition, however, in the home delivery segment of the trade.⁽¹⁸⁾

⁽¹⁶⁾ The OMDA policy on licensing restrictions or protected marketing areas, for example, is neutral, though there are two opposite internal factions with strong views on this question.

⁽¹⁷⁾ Page 180, *Report of the Ontario Milk Industry Inquiry Committee* (subsequently referred to as MIIC) published in March 1965.

⁽¹⁸⁾ The formula pricing system has enabled distributors to readily announce retail price changes for an entire market, rather than raise their prices individually.

The growing importance of supermarket sales and other wholesale accounts has spurred distributors to bid aggressively to get this large volume business. This has led to secret price shading, rebates, discounts and other forms of price cutting. In 1959 it was estimated that in the Toronto market alone wholesale discounts amounted to over \$1 million or about 5 per cent of the total wholesale gross in the market.⁽¹⁹⁾ The emphasis on wholesale sales by certain dairies, moreover, means that the loss of even a single large account to another firm can be intolerable.⁽²⁰⁾ The supermarket chains in particular use their volume requirements as leverage to exact the lowest possible prices from supplying dairies. The wholesale milk business has not only given rise to direct competitive bidding in the industry, it has also disrupted convenient informal arrangements among distributors. For example, the traditional system of rotating wholesale accounts among the different dairies in certain markets has been jeopardized and in many cases abandoned because one or more distributors will no longer co-operate. Viewed in the context of the last 15 years, it might reasonably be said that the trend to wholesaling of milk has substantially freed the industry from its rigid pattern of price discipline.

The rise of jug stores and other low-cost forms of distribution also have served to jar the industry out of its habit of controlled pricing and restricted competition. Such cash 'n carry operations as Becker in Toronto are based on providing a minimum of service and charging low retail prices.⁽²¹⁾ These low jug store prices in turn create pressure on the supermarkets to sell at the same levels, thus indirectly forcing distributors to take a lower return or risk losing accounts. Jug stores have also affected the home delivery trade. In order to arrest the decline in home delivery volume, distributors have introduced 3-quart jugs at lower unit prices and begun to feature "creams" and other products. Thus jug stores have not only acted as price leaders but also have exerted an influence on packaging and merchandising methods.

Summarizing this subsection, then, we may attribute the revival of competition in the Ontario fluid milk industry to three main underlying factors: de-control of prices, rapid technological advances, and extensive shifts in consumer demand as evidenced by the new packages, new products and new methods of distribution. Another development that may have contributed to the increased competition in the industry was the concentration that has occurred. Contrary to the normal situation, there may be good grounds for concluding that increased concentration

in Ontario's fluid milk industry has resulted in more effective competition. This question is discussed in the following subsection.

The Effect of Concentration on Competition

The long-run trend in the fluid milk industry to larger and fewer units is often construed as a threat to competition. Even Justice Wells felt obliged to say . . . "the distribution of fluid milk is a business in which large profits lie in large volume of distribution, and this fact naturally tends towards monopoly." However valid this cause and effect view of concentration and monopoly may be in general, it certainly is not self-evident in respect to the fluid milk industry in Ontario.

It is impossible to state flatly or with great confidence that the increase in concentration in the Ontario fluid milk industry has either inhibited or fostered competition. There are several reasons why competition in the industry may be more vigorous even though the "Big Three" have increased their share of the market. First, the large independents may have expanded by a relatively greater amount than the "Big Three", hence be in a stronger position to compete effectively, particularly for the wholesale business. In markets such as Toronto, Ottawa and Windsor this indeed appears to be the case. Second, the increase in concentration may have resulted in more aggressive inter-market activity than would have been the case if plants had remained smaller and more numerous. And third, increased concentration may have allowed more firms to reach a scale of operation which permits the production of a complete range of products and containers: new and better products and a wider choice to consumers are dimensions of competition just as much as lower prices. On the other hand, the concentration that has occurred may have deterred potential entrants because of the larger scale of operations and greater capitalization necessary for success, and thereby lessened the degree of competition. On balance, we conclude that the overall impact of increased concentration has been neutral. In our opinion the rise of the "Big Three" and other

⁽¹⁹⁾ From a study by the Ontario Department of Economics and Development.

⁽²⁰⁾ A drop of say 30 per cent in a distributor's volume means that unit costs are much higher, hence there is great pressure to cut prices further in order to get back the volume necessary to operate at full capacity. Such a situation occurred in 1964 in the Toronto market when Dominion Dairies lost the Loblaw account to Donlands.

⁽²¹⁾ Becker now has about 80 stores and there are perhaps 200 such stores all across Toronto. Jug store chains, such as Uplands, and Mac's are "captives" of the regular distributors, Findlay-Kemp and Silverwood, respectively.

substantial distributors has contributed much to the progress of the industry, without seriously undermining the competitive character of Ontario fluid milk markets.

Competitive Abuses:

The Combines Investigation Act

In the last decade there have been three occasions when the Combines authorities have stepped in to investigate a competitive situation in the Ontario fluid milk industry. The first two occasions — in 1954 and 1959 — involved complaints that Toronto distributors were combining to restrict competition.⁽²²⁾ The third case was in 1961 and this time centred around predatory price cutting in the Ottawa market. In the 1954 and 1959 investigations it was discovered that the situation had corrected itself, hence no further action was taken.⁽²³⁾ The Ottawa price war, on the other hand, gave rise to an extensive inquiry and led to a recommendation that the principals involved be prosecuted under Section 33A of the Act.⁽²⁴⁾

The 1961 case illustrated the only real danger of totally unrestricted competition in the industry, namely, the possibility that multiplant firms will engage in regional price discrimination.⁽²⁵⁾ If large geographically diversified firms are allowed to spark localized price wars, a permanent impairment of market structure and competition will undoubtedly result. This form of destructive competition must be prevented by quick and decisive action under the Combines Act.

⁽²²⁾ The 1954 complaint alleged that Toronto dairies refused to submit competitive tenders for hospital milk accounts. The 1959 complaint claimed that Toronto distributors were enforcing resale price maintenance within the market.

⁽²³⁾ The 1959 case is of interest in that it points up the strong influence of the Ontario government on the industry. Note, for instance, the following comment by the Director when reporting the case in 1961. (See p. 21, *Report of the Director*, year ended March 31, 1961.)

"The evidence indicated that on September 21 and 23, 1959, meetings with the distributors were convened by the Dairy Commission. An examination of what took place at those meetings indicated that efforts were made to have the industry discontinue all discounts and rebates at the wholesale level and to prevail upon all retail outlets to maintain minimum retail selling prices."

⁽²⁴⁾ See the *Report on Ottawa Milk Pricing*, September 1964. Producers Dairy has in fact, been charged with violating Section 33A of the Act, but the case has not yet come to trial.

⁽²⁵⁾ In support of the recent F.T.C. 'merger guidelines' for the U.S. dairy industry, Commissioner Elman discussed the threat to competition posed by powerful multimarket companies:

"A firm strongly entrenched in a number of markets may thereby be able to engage in deep, sustained and discriminatory price cutting", which "may be a potent weapon for repulsing new competition and preventing entry by smaller firms". (See *Business Week*, May 22, 1965.)

CONCLUSIONS

This study is quite long and deals with a complex and broad subject area. Therefore, we have summarized the main findings that have come to light and reiterated those conclusions which seem most important.

1. The Ontario fluid milk industry may be usefully and realistically conceived as embracing all establishments in Ontario engaged in processing and distributing fluid milk and/or fluid milk products.

2. The industry has undergone two decades of rapid change and innovation which have profoundly altered its structure and character. The pace of change, moreover, seems to be accelerating.

3. Consolidation of processing and distributing facilities has been a major result of the changes that have occurred. This consolidation reflects the substantial economies of scale inherent in the fluid milk business, the great technical advances that have been made, and the important shifts in consumer demand that have occurred.

4. Traditionally the industry has consisted of isolated local markets, organized along oligopolistic

TABLE I
GROWTH OF THE ONTARIO MARKET FOR
FLUID MILK AND FLUID MILK PRODUCTS
1945 to 1964
(Sales by Licensed Commercial Dairies)

Year	Fluid Milk	Cream	Chocolate Drink	Buttermilk
	(millions of quarts)			
1945	432.9	12.4	16.3	5.5
1950	434.0	13.5	11.5	4.9
1955	529.7	16.1	14.4	8.0
1960	604.7	21.1	16.7	7.4
1961	609.5	22.1	17.0	7.5
1962	626.5	23.6	19.0	7.4
1963	642.9	24.2	20.7	7.4
1964	662.5	25.5	22.4	7.2
% Increase 1961/1945	40.8%	78.2%	4.3%	34.5%
% Increase 1964/1945	53.0%	105.6%	37.4%	30.9%
% Increase 1964/1955	25.1%	58.4%	55.6%	—10.0%

Growth in Ontario population

1961/1945 = + 55.8%

1964/1945 = + 64.7%

1964/1955 = + 25.1%

Source: *Monthly Dairy Report*, Farm Economics and Statistics Branch, Department of Agriculture.

lines. Improvements in transportation and refrigeration have gradually transformed this structure into a broader conglomerate of interrelated markets.

5. The nature of demand, the organization of markets, and the history of government control all served to mould the industry into a pattern of price discipline and restricted competition.

6. Between 1945 and 1961 the "Big Three" dairies increased their share or control of the industry from 30 per cent to 35 per cent. Today the "Big Three"

market share may be as high as 40 per cent. In individual markets the "Big Three" control from one-half to three-quarters of the sales of fluid milk.

7. Several large independents also have become substantial powers in the industry. Twelve of the largest independents accounted for some 15 per cent of the market in 1961.

8. The chief causes of this concentration were the extensive merger activity since World War II and the important shift in consumer demand towards low fat milks.

TABLE II
CALCULATION OF 1961 CONCENTRATION FIGURES

<i>The "Big Three"</i>	<i>Sales in Ontario markets (except Ottawa)</i>	<i>Sales in Ottawa⁽¹⁾</i>	<i>Total Sales by the "Big Three"</i>	<i>Total Industry Sales</i>	<i>"Big Three" Sales as % of Total Industry Sales</i>
<i>Millions of Quarts</i>					<i>%</i>
Fluid milk	180.7	25.0	205.7	609.5	33.7
Cream	8.25	1.10	9.35	22.13	42.3
Buttermilk	2.95	.22	3.17	7.56	41.9
Chocolate drink	4.76	.74	5.50	17.01	32.3
Total fluid milk and fluid milk products ⁽²⁾	(a) All products weighted equally:		223.7	656.2	34.1%
	(b) Cream sales weighted by four:		252	723	34.9%
<i>The "Big Three" Plus 7 Independents</i>	<i>Sales in Ontario markets (except Ottawa)</i>	<i>Sales in Ottawa⁽¹⁾</i>	<i>Total Sales by the 10 Firms</i>	<i>Total Industry Sales</i>	<i>Sales by 10 Firms as % of Total Industry Sales</i>
<i>Millions of Quarts</i>					<i>%</i>
Fluid milk	240.4	30.8	271.2	609.5	44.5
Cream	10.62	1.35	11.97	22.13	54.1
Buttermilk	3.85	.26	4.11	7.56	54.4
Chocolate drink	6.42	.91	7.33	17.01	43.1
Total fluid milk and fluid milk products ⁽²⁾	(a) All products weighted equally:		294.6	656.2	44.9%
	(b) Cream sales weighted by four:		330	723	45.6%
	<i>Total Sales by the above 10 Firms</i>	<i>Sales⁽³⁾ by Five other Independents</i>	<i>Total Sales by the 15 Firms</i>	<i>Total Industry Sales</i>	<i>Sales by 15 Firms as % of Total Industry Sales</i>
<i>Millions of Quarts</i>					<i>%</i>
Fluid milk	271	26	297	609	49%

⁽¹⁾ Sales in the Ottawa market were estimated on the assumption that the two firms—Borden and Dominion—accounted for 65 per cent of total market sales while the large independent—Clark—accounted for 15 per cent of total market sales. This assumption is in line with D.B.S. figures which indicate that the above three firms plus one other smaller firm accounted for 85 per cent of total fluid sales in Ottawa in 1961.

⁽²⁾ In order to arrive at an overall concentration figure for fluid milk and fluid milk products, it was necessary to assign weights to each of the four products. In case (a)

each product was weighted as 1. In case (b) cream was weighted as 4, and the other three products as 1, in recognition of the fact that cream is generally sold in half pints rather than quarts, and it retails at 75-80¢ per quart as compared to 20-25¢ for the other products.

⁽³⁾ Author's estimate.

Sources: Farm Economics and Statistics Branch, Ontario Department of Agriculture; Dairy Statistics Branch, Agriculture Division, D.B.S.

9. Since 1948 there has been a great revival of competition within the Ontario fluid milk industry. Firms now compete vigorously for wholesale accounts within markets, and are extending their scope of operations into neighbouring markets.

10. Price competition for door-to-door milk is still practically non-existent. A system of formula pricing and the strong trade organization, the OMDA, may be the major reasons for this lack of price competition on home-delivered milk.

11. New low cost methods of distribution such as jug stores have disrupted the industry and tended to hold down retail prices, both on home delivery and in supermarkets.

12. Increased concentration in the industry has not diminished the degree or quality of competition.

13. The potential of multiplant firms such as the "Big Three" to engage in regional price discrimination or localized price wars constitutes an important threat to the long-run competitive vitality of the industry; cases of regional price discrimination require prompt and effective action by the Combines authorities.

14. In general, competition has been a dynamic and revitalizing force in the industry. Under a healthy competitive climate the fluid milk industry in Ontario is likely to progress towards greater strength and efficiency.

TABLE III
MERGERS AND CONSOLIDATIONS OF FLUID MILK DISTRIBUTORS IN ONTARIO
1945 to 1965

(as recorded in the *Canadian Dairy and Ice Cream Journal*)

Year	Number of Mergers and Absorptions	Major Mergers and Consolidations
1945	2	Acme Dairy and Farmers Dairy (Toronto) consolidated into single Toronto operation of Dominion Dairies
1946	4	
1947	2	
1948	4	Hamilton Springbank Dairy purchased by Silverwood (Hamilton)
1949	3	Sanitary (St. Catharines) purchased by Mason's (St. Catharines) ⁽¹⁾
1950	8	
1951	1	
1952	6	Sani-Sealed Dairies (Toronto) purchased by Dominion Dairies (Toronto). Burkhard (Kitchener) purchased by Maple Lane (Kitchener)
1953	2	
1954	4	Maple Leaf (Pembroke) purchased by Dominion Dairies (Ottawa) ⁽²⁾
1955	5	Peerless Countryside Dairy (Windsor) purchased by Purity (Windsor). Fairfield Dairy (Hamilton) purchased by Dominion Dairies ⁽²⁾ . London City Dairies (London) purchased by Dominion Dairies ⁽²⁾
1956	5	Walnut Dairy (Toronto) purchased by Silverwood (Toronto). Wilson Dairies (London) and Robb-Brown (London) purchased by Borden (London). Kent Dairy (Chatham) purchased by Purity (Windsor) ⁽²⁾
1957	3	Burlington Lakeside (Hamilton) purchased by Royal Oak (Hamilton)
1958	6	Highland Dairy (Toronto) sold its routes to Blantyre, Valleyview and Rutherfords
1959	3	Gold Seal Dairies (London) purchased by Borden (London)
1960	7	Johnson-Hill Dairy (London) purchased by Silverwood (London) ⁽¹⁾ . Lakeshore Dairy (Toronto) purchased by Silverwood (Toronto) ⁽¹⁾ . Silverwood (Guelph branch) purchased by Royal (Guelph)
1961	5	Paulger's Blantyre (Toronto) purchased by Silverwood (Toronto). Brookside Dairy (Kingston) and Price's Dairy (Kingston) joined into single operation — Brookside-Price
1962	5	Roselawn (Toronto) purchased by Dominion Dairies (Toronto) ⁽¹⁾ . Mason's (St. Catharines) purchased by Silverwood (St. Catharines). Terrace Hill (Brantford) purchased by Borden ⁽²⁾
1963	4	Pleasant View (Pembroke) purchased by Clark (Ottawa) ⁽²⁾ . Sarnia City Dairy (Sarnia) and Purity Co-op Dairy (Sarnia) merged into single operation
1964	8	Rainbow Dairies (N. Falls, St. Catharines) purchased by Borden (Niagara Division)
1965 (Jan. to Oct.)	6	Brookside-Price (Kingston) purchased the milk division of Hemlock Park Dairy (Kingston). Silverwood acquired Jeffrey's Dairy (St. Catharines), Kingsville Dairy, and Campbell's Dairy (Peterborough). Findlay Dairy Ltd. and Kemp's Dairy Ltd. of Toronto merged to form Findlay-Kemp Dairies Ltd.
Total - 20 yrs. 93		

⁽¹⁾ No transfer of tangible assets or property, goodwill only.

⁽²⁾ Entered new market through this acquisition.

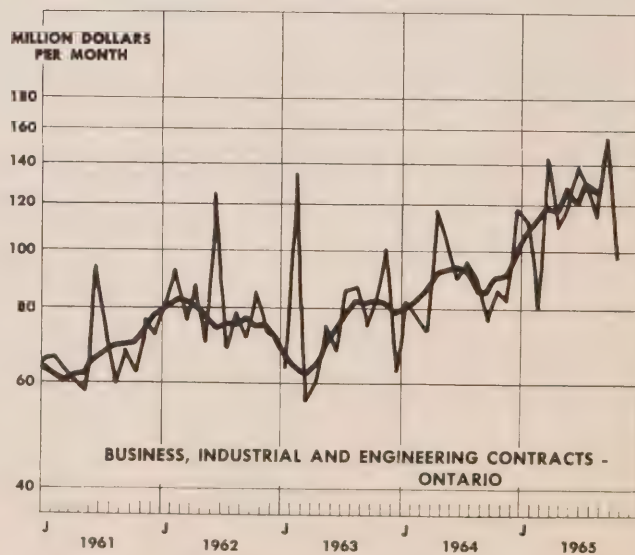
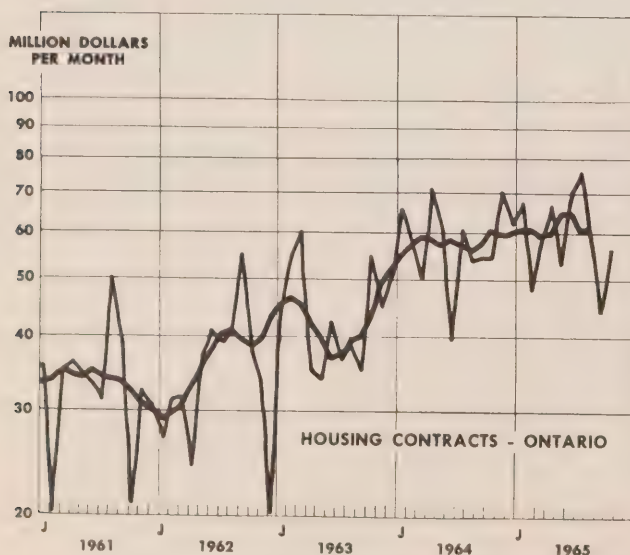
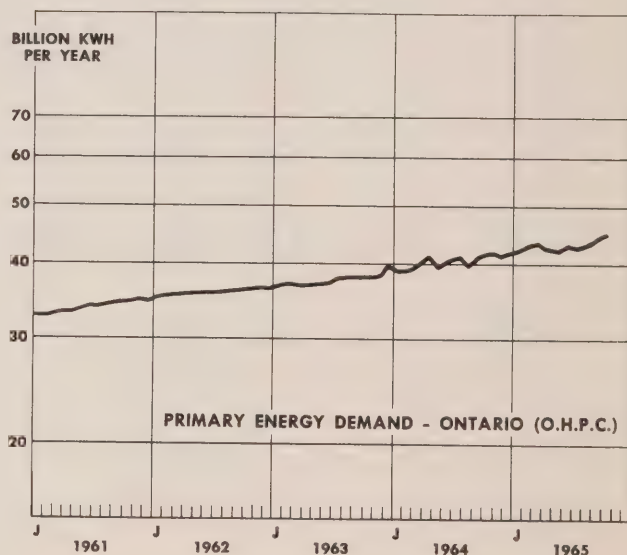
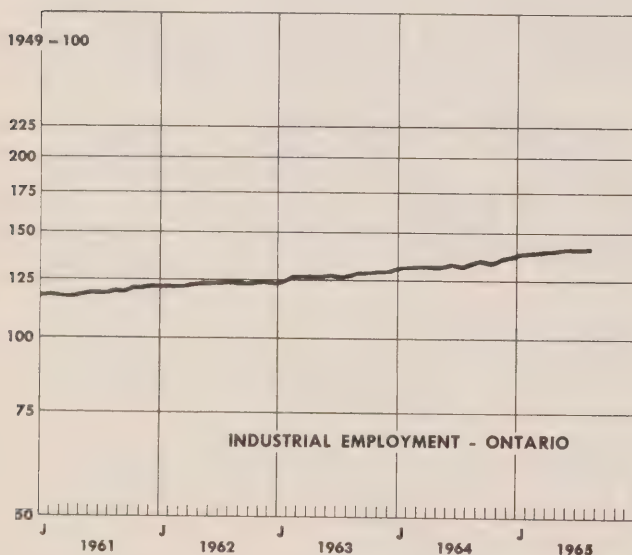
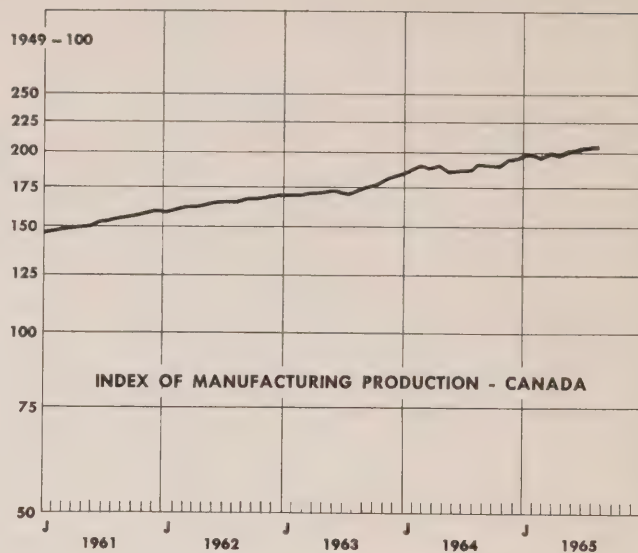
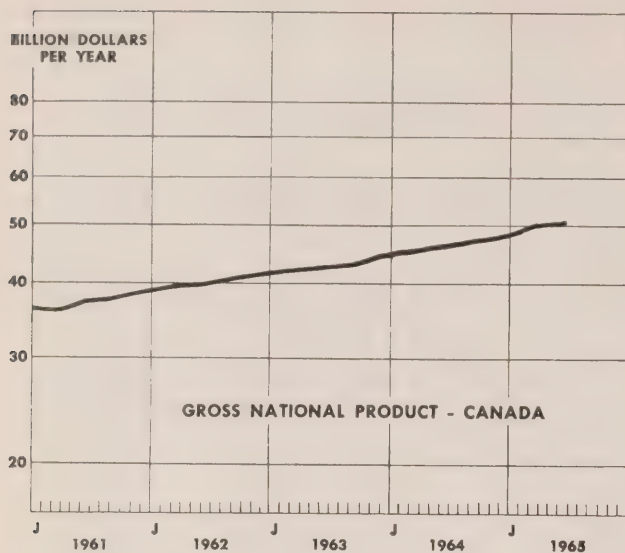
(* Figures for Canada)

1964-----1965-----

COINCIDENTAL AND LAGGING INDICATORS

ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED[illegible]

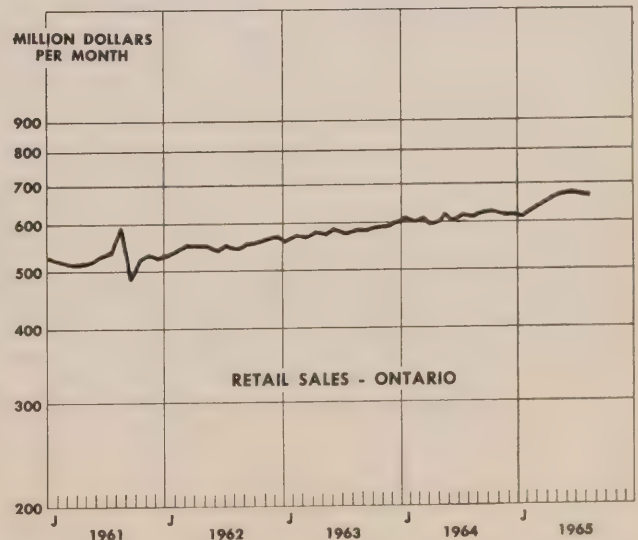
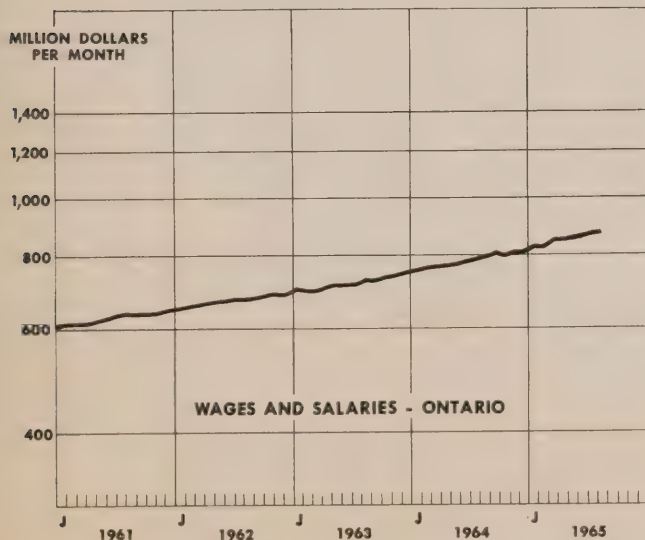
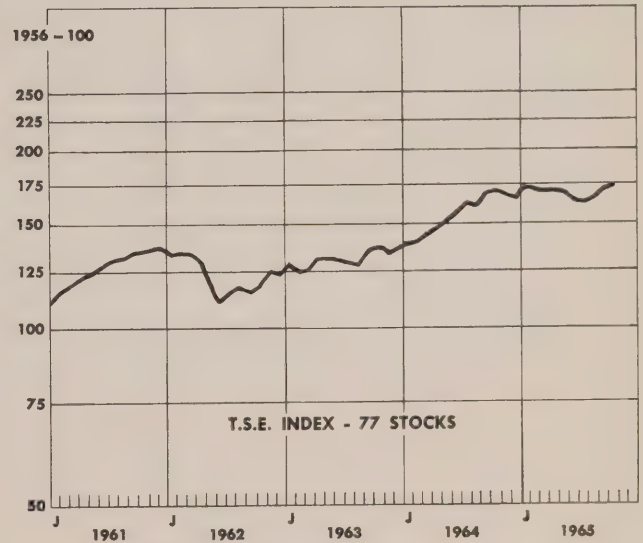
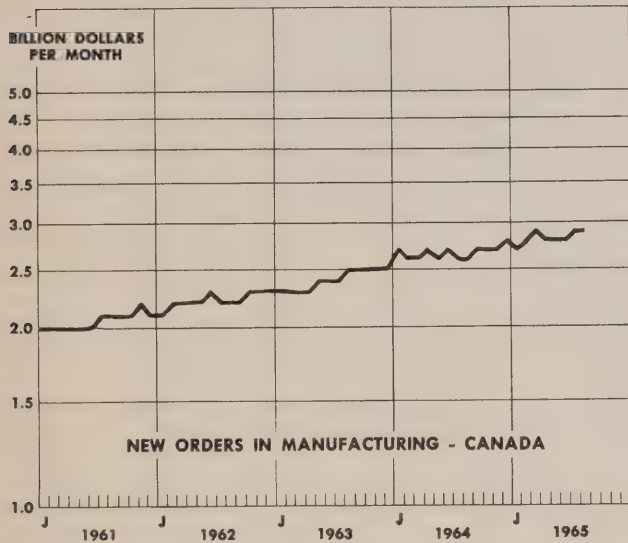
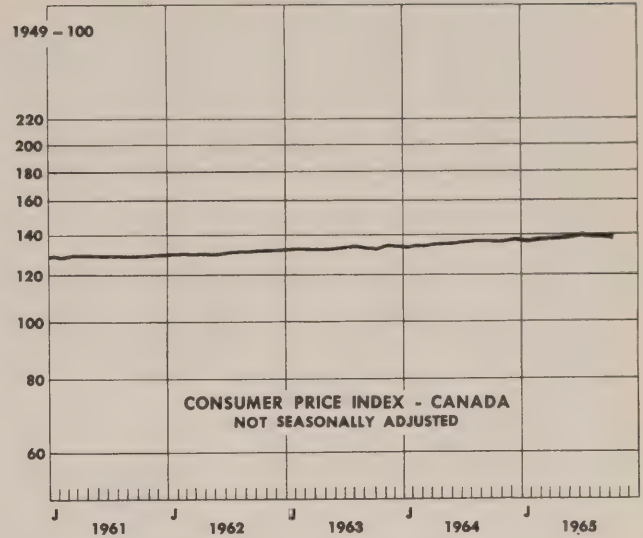
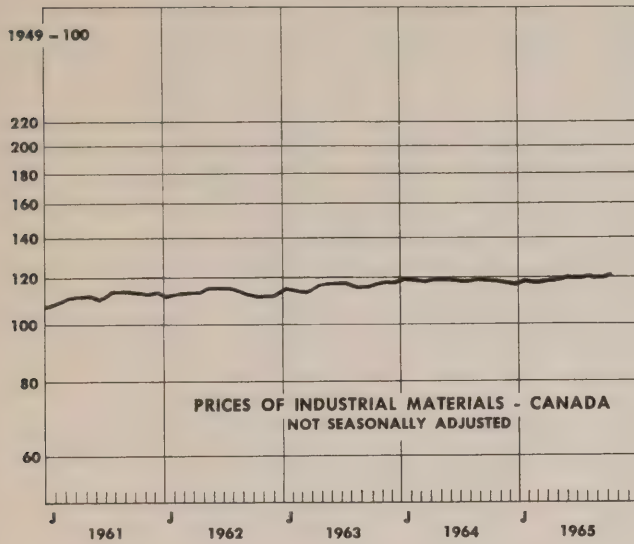
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



— TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



ONTARIO ECONOMIC REVIEW

DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

DECEMBER 1965
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CONTENTS

The Ontario Economy: Annual Review 1965	1
Significant Events of 1965	3
Gross Provincial Product	5
Foreign Trade	5
Manufacturing Production	6
Construction	7
Finance	7
Employment	8
Income	8
Sales	8
Mining	9
Agriculture	9
Forest-Based Industries	10
Indicators and Charts	11

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THE ONTARIO ECONOMY

ANNUAL REVIEW

1965

One adjective best describes the Ontario economy in 1965: booming.

For the fifth consecutive year Ontario enjoyed substantial economic growth. Old records fell in 1965 as new all-time highs were established in the levels of employment, income and industrial production. Ontario's labour force passed the 2.6 million mark. The unemployment rate dropped to the lowest level since 1956. And estimated *per capita* personal income rose to a record \$2,264. For Ontario consumers it meant a year for record purchases of automobiles and a wide variety of other consumer goods. It also meant the highest level of prosperity ever enjoyed in the province.

Total growth, measured by the change in Gross Provincial Product, was an estimated 9.1 per cent in 1965. This represented the change in the total value of goods and services produced in Ontario. Approximately six per cent was real growth, or an actual change in the volume of production. The remaining three per cent represented an increase in prices — the largest increase of the current expansion. Higher prices reflected the impact of cyclical downturns in cattle and hog production, adverse weather for fruits and vegetables, the federal sales tax, and, more generally, the reduction of slack in the economy and the build-up of pressures on existing supplies. (The last two are characteristics typical of an economy operating near full capacity.) Toward the end of the year, however, there were indications that price increases were moderating, leading to the expectation that 1966 would see a smaller price rise.

In Canada one out of every five dollars worth of goods and services produced is exported. Consequently a good year for Canadian exports means a

good year throughout most of the economy. During 1965, Canadian merchandise exports including re-exports reached a level of \$8.65 billion, 4.2 per cent greater than in 1964. While this increase was not as impressive as the 19 per cent increase experienced in 1964, the higher level of exports did reinforce business confidence throughout Canada. For Ontario, the nucleus of manufacturing production in Canada, exports played a vital role. Impressive increases in secondary manufacturing exports — particularly in the automotive field — increased incomes and employment, and encouraged investment in the province.

That, in addition to the generally favourable economic climate created in 1964, did much to keep domestic investment at a high level. With income and consumer demand rising rapidly, and prospects for further increases very good, business investment — particularly in durables manufacturing — rose markedly in 1965. Total capital investment in Ontario rose an estimated 20 per cent to a level of about \$4.4 billion. Business investment in plant and equipment contributed most to the total, with construction investment quite heavy. The result was increased productive capacity, generally keeping abreast with the growing requirements dictated by rising consumer demand. Throughout the year the manufacturing capacity-utilization ratio came closer to optimum, raising productivity and profits, and encouraging further expansion. The investment boom, free of any major bottlenecks, generated further increases in income. These in turn quickly diffused throughout the economy.

Two particular areas of activity were highlighted during the year. These were the construction indus-

try and the durables manufacturing group of industries. The value of construction contract awards in Ontario rose by 19.1 per cent, mostly because of the increase in business construction. Throughout the year durables manufacturing remained about 11 to 12 per cent higher than it had been one year earlier. Employment in construction was about 12 per cent higher throughout the year, in durables manufacturing about eight per cent.

There were three stimuli in 1965 which encouraged growth in these two areas, as well as in the economy as a whole.

One of the most significant was the rise in the American growth rate. To meet the requirements for growth, Americans increased their demand for Canadian resources, particularly mineral, wood and paper products. Canada's supplying industries in turn used the income derived from their sales to acquire the durable goods produced in Ontario. Prosperity in the United States also meant a market yet more receptive to Ontario's manufactured exports. Sales missions promoted by the Ontario Department of Economics and Development enjoyed greater success than ever before.

The second stimulus was the increase of wheat and flour exports to communist countries, giving the prairie provinces additional income. With that income effective demand was created for Ontario products. To modernize and expand agricultural production facilities, new agricultural equipment was purchased. Almost all of it was produced in Ontario. Increased affluence led to the purchase of more automobiles — almost all from Ontario. In fact, a very substantial portion of all consumer goods came from this province.

The third stimulus to growth was in the nature of federal and provincial economic policies. By following expansionary policies throughout most of the year, the two levels of government permitted economic growth to continue.

A few other less basic, but still noteworthy stimuli to growth could be cited. One was the auto industry strike in the United States late in 1964; this had the effect of pushing Ontario's automobile production and sales into 1965. Another was the extension of steel industry negotiations in the United States, extending the period of inventory accumulation. This drove up incomes and demand in that country, at the same time drawing in raw materials from Canada and creating buoyant conditions here. The better-than-average wheat crop, giving farmers additional income, was yet another. Finally, there was the stability of foreign exchange reserves in the face of a larger current account deficit. The chartered

banks, drawing on their U.S. dollar deposits in Europe, provided the financing for about one-half of Canada's current account deficit. Free of the need to defend our balance of payments, the Bank of Canada was able to pursue a credit policy related to domestic capacity. This ultimately served the purpose of helping to promote adequate economic growth.

The necessity of promoting balanced growth in the economy was one of the important points made in the *First Annual Review of the Economic Council of Canada*. By establishing guidelines for growth to 1970, the Council provided specific objectives toward which economic policy could be directed. A comparison of actual performance with the growth objectives set down in the *Report* could thus give some indication of the adequacy of existing policy.

Specifically, the Council stated that it was possible and necessary to expand output 5.5 per cent each year from 1963 to 1970. It further stated that unemployment was to be reduced to three per cent of the labour force by 1970. At the same time employment was to be increased 3.1 per cent annually — creating 1.5 million new jobs over that period. Output per man-hour and per person employed was to grow at annual rates of 3.0 per cent and 2.4 per cent respectively. To meet these objectives exports were to increase 5.3 per cent each year. Secondary manufacturing exports were to double in the seven year period, increasing 10 per cent each year. Housing needs and plant and equipment requirements meant that business investment had to rise nine per cent each year.

The performance of the Canadian and Ontario economies in 1964 and again in 1965 demonstrated that much progress was being made in reaching the 1970 objectives. In only two years, secondary manufacturing exports rose by 66 per cent, reaching two-thirds of the objective for 1970. In 1965 productivity rose by an estimated three per cent. Canada's unemployment rate dropped from 5.5 per cent in 1963 to 3.9 per cent in 1965; Ontario's declined from 3.8 per cent to 2.5 per cent in the same period.

Actually, Ontario experienced a *shortage* of labour in 1965, particularly of skilled workers. To meet this problem and to generally improve productivity, the Province of Ontario expanded its vocational centres and programs for worker retraining and education. In addition it set up plans to establish institutes of technology. To upgrade skills it undertook, in co-operation with business, a program of on-the-job worker training. So that an adequate supply of skilled labour would be available soon, it called for increased immigration.

Significant Events of 1965

The year 1965 was highlighted with several events which had a bearing on the Ontario economy. Some of these — both isolated events and events of a more substantial nature — are included below.

Automotive Agreement

On January 15, 1965 the Automotive Free Trade Agreement between Canada and the United States was signed by the heads of the two countries. Under its terms Canadian motor vehicles and original equipment parts were permitted duty-free entry into the United States; in exchange Canada removed its duty on imported motor vehicles and parts used in their manufacture. The Agreement went into effect on January 18, 1965.

The Agreement grew out of the desire to improve trade in motor vehicles and parts, and help correct a chronic Canadian trade imbalance with the United States. As consumer of 7.5 per cent of North America's total automotive output but producer of only four per cent, Canada had been faced with persistent automotive trade deficits. In 1964 this deficit was almost \$600 million.

This was not the first attempt to correct the situation. In 1962 an incentive plan had been introduced permitting the duty-free import into Canada of automatic transmissions and parts and stripped engines in amounts equivalent to the auto companies' exports of Canadian-made parts. However, this plan met with opposition from American auto parts producers who claimed that it created a Canadian export subsidy. It was argued that such imports from Canada should be subject to countervailing duties. Attempts to reconcile this dispute without harming Canadian interests ultimately led to the Automotive Free Trade Agreement.

Under the Agreement only motor vehicle manufacturers and parts makers producing components on order from vehicle manufacturers were permitted to import duty-free into Canada. To qualify, a manufacturer had to produce vehicles in the same ratio to his motor vehicle sales in Canada as existed during the period August 1, 1963 to July 31, 1964; and he had to maintain at least the same Canadian "value added" in his Canadian vehicle production as existed in that base period.

The effect of the Agreement was to stimulate automobile production and open up a much larger total market for Canadian producers, enabling them to achieve lower cost through a larger volume of production. When the Agreement was signed, private assurances had been given that by 1968 the value of Canadian motor vehicle production would be \$260

million a year more than what it otherwise would have been. Generally, it was expected that over 20 thousand new jobs would be created by that time.

In keeping with this growth the major automobile producers announced vast expansion programs during 1965. Ford Motor Company of Canada announced the \$50 million retooling, realigning and modernization of its engine and foundry plant at Windsor, the \$13.3 million modification and re-equipment of its Oakville passenger car assembly plant, and the construction of a \$25 million truck plant in Oakville. Most significant was its announcement of plans to construct a \$65 million automobile plant at Talbotville, located between London and St. Thomas. General Motors revealed plans for a new 625,000 sq. ft. trim plant in Windsor and an 850,000 sq. ft. truck plant at Oshawa. Chrysler spoke of a \$7 million addition to its assembly plant at Windsor, increasing its capacity by one-third. American Motors planned a \$2.5 million engine plant at Brampton.

Parts producers too revealed plans for expansion. These included a new plant in Hamilton for interior trim, door panels, etc., an engine valve-lifter plant in Wallaceburg, a \$1.5 million electrical wiring systems plant at Ingersoll, and a \$12-14 million frame plant in Kitchener. A \$7 million expansion was planned for an engine plant at St. Catharines, while in Thorold Township there was to be a \$3 million expansion of a frame plant and a \$1 million parts plant expansion. In Windsor \$6.9 million was to be spent on a wheel plant.

Tax Reduction

In April the Minister of Finance brought down the budget for the year 1965, introducing a 10 per cent reduction in personal income tax (with a maximum reduction of \$600 each year), effective July 1, 1965.

For the average man earning \$5,000, with a wife and two children, the reduction was to be about \$30 in a full year.

In dollar terms the reduction for the second half of 1965 was estimated at \$170 million; for a full year it was estimated at \$265 million. The full amount was expected to be put back into the economy in the form of private spending to stimulate further expansion. The action of the Minister of Finance followed the line of thinking of the Economic Council of Canada in emphasizing consumer spending to encourage employment and capital spending.

Atlantic Acceptance

One of more spectacular events in the financial community in 1965 was the collapse of the Atlantic Ac-

ceptance Corporation. The loss, estimated at about \$34 million, had the effect of undermining confidence, and this was reflected in a noticeable stock market decline.

To ease the problem of inadequate funds in the money market, the Bank of Canada added to the money supply, thus providing the chartered banks with additional cash reserves. This had the effect of protecting the near-bank system of credit; but it did increase the money supply at a time when the Bank might have been expected to restrain such a rise. Ultimately the money supply in 1965 increased by over \$2 billion.

Designated Areas

In keeping with the new emphasis on regional development, the Federal Government passed the Area Development Incentives Act in June 1965. (This Act replaced one which had been established in 1963.) Under the new Act manufacturing and processing industries establishing new facilities or expanding existing facilities were eligible for development grants from the Federal Government, so long as they established in specifically designated areas. The areas, whether National Employment Service (NES) areas, counties or census divisions, were selected according to various criteria, but fundamentally because of low income or high unemployment rates.

In August full details under the Area Development Program were announced, establishing ten designated areas in Ontario. Along with the specific criterion used in each case these were: Bracebridge and Parry Sound NES areas (low average family income); Sturgeon Falls NES area (high unemployment); Elliot Lake NES area (declining employment); Owen Sound, Collingwood and Midland NES areas (recognized as an economic region with low average family income); and Haliburton County and the Districts of Manitoulin and Parry Sound (contiguous areas with low average family income).

During the latter part of the year several industries announced their intention to establish in a designated area. Included were two projects in Midland: RCA Victor revealed plans for the construction of a colour television tube plant, while Motorola announced that it would build an automobile radio plant. Also, Goodyear planned to build plants in Collingwood and Owen Sound.

Wheat Sales

The announcement of new wheat sales to the U.S.S.R. in August was significant for the Canadian

economy as a whole. At that time the Minister of Trade and Commerce stated that the new sale of 187 million bushels of wheat, valued at \$450 million, could bring 1965 wheat exports to a level that would add \$1.2 billion to the Canadian economy. In addition, delivery of part of the wheat in the contract before the end of 1965 promised to assist Canada's trade balance, which had not displayed the same vigorous growth in 1965 as it had in 1964.

However, even with part of the deliveries completed in 1965, the current account deficit was still an estimated \$1 billion.

Restriction of Direct Investment

Early in December the Government of the United States, in announcing measures to improve its balance of payments, stated that Canada was no longer to be excluded from the voluntary quotas placed on the direct investment of American firms. (The change in the status of Canada was partly due to its having acquired a foreign exchange reserve balance in excess of the amount agreed upon with the United States in 1963.) It was requested that such firms limit investment in plant and equipment in foreign countries in 1965 and 1966 to 90 per cent of the total for 1962-64.

The reaction in Canada to this announcement, while cautious, was not unduly pessimistic. While opinion varied as to whether there would be a significant cut-back in American direct investment, it was generally held that 1966 would see a substantial increase in total business investment in plant and equipment in Canada. As for foreign capital requirements, long-term borrowing from the United States was expected to remain an important source of foreign capital, so long as Canada adhered to the limits set for exemption from the U.S. Interest Equalization Tax.

Higher Interest Rate

Coming at the same time was the announcement of an increase in the United States official bank discount rate, from 4.0 per cent to 4.5 per cent. The immediate result was the increase in the Canadian bank rate from 4.25 per cent to 4.75 per cent. The action of the central banks in the United States and Canada thus set off a controversy regarding the advisability of restricting credit and making money tighter. However, it was generally accepted that, provided no further drastic changes were made, there would be no harmful effect on the United States and Canadian economies. Expansion was expected to go on, perhaps at a more restrained rate.

Gross Provincial Product

Ontario's Gross Provincial Product in 1965 reached a record level of \$20.7 billion, approximately \$1.7 billion or 9.1 per cent higher than in 1964. Of this increase about three per cent was accounted for by an increase in prices. Real growth, at approximately six per cent, was not as high as Ontario's 7.1 per cent real growth in 1964, or Canada's 1964 real growth of 6.5 per cent. However, it did surpass the objective level set by the Economic Council of Canada.

Table I shows the growth of Ontario's Gross Provincial Product over the period 1953 to 1965.

TABLE I

ONTARIO GROSS PROVINCIAL PRODUCT AT MARKET PRICES, 1953-1965*

	Current Dollars	Annual Change	Price Index	Constant 1957 Dollars
	\$ Billion	%	1957 = 100	\$ Billion
1953	9.8		90.9	10.8
1954	10.1	3.1	93.1	10.8
1955	10.9	7.9	93.5	11.7
1956	12.0	10.1	97.1	12.4
1957	13.0	9.3	100.0	13.0
1958	13.4	3.1	101.9	13.2
1959	14.3	6.7	104.5	13.6
1960	14.7	2.8	106.1	13.9
1961	15.2	3.4	106.8	14.3
1962	16.4	7.9	108.4	15.1
1963	17.4	6.1	110.3	15.7
1964	19.0	9.2	112.8	16.9
1965*	20.7	9.1	116.0	17.9

*Preliminary estimate.

Source: Ontario Department of Economics and Development.

In general, Ontario's Gross Provincial Product has accounted for just over 40 per cent of Canada's Gross National Product.

Foreign Trade

Total Canadian merchandise exports, including re-exports, rose by an estimated 4.2 per cent to a level of \$8.65 billion in 1965. The most recent data available, covering the period January to October, did not indicate as large an increase as that; however, the inclusion of substantial wheat and flour exports at the end of the year would have brought the total up to the estimated level. Still, this gain was only moderate in the light of a 19 per cent increase in exports during 1964. In that period had been included the bulk of wheat shipments to communist countries, shipments which had been contracted earlier.

Table II indicates that exports to the United States increased more than exports to any other country, rising 10.5 per cent. In 1965 over 56 per cent of Canada's exports went to that country. The United Kingdom accounted for 13.4 per cent—down 1.1 per cent from 1964. The European Economic Community took more than seven per cent.

TABLE II

CANADA MERCHANDISE EXPORTS, 1963-1965*

	1963	1964	1965*	1964/63	1965*/64
	\$ Million			% Change	
U.S.A.	3,913	4,435	4,900	13.3	10.5
U.K.	1,015	1,207	1,160	18.9	-3.9
E.E.C.	487	565	612	16.0	8.3
Sub-total	5,415	6,207	6,672	14.6	7.5
All others	1,565	2,097	1,978	34.0	-5.7
Total	6,980	8,304	8,650	19.0	4.2

*1965 figures estimated by the Ontario Department of Economics and Development.

1963-64 data source: DBS, *Canadian Statistical Review*.

In spite of the only limited gains of overall Canadian exports during the year, secondary manufacturing exports grew impressively. Based on January to October data, these exports showed an increase of 15.4 per cent over the corresponding 1964 figure. Because Ontario produces about one-half of Canada's manufacturing output, the growth of such exports was a particular boon to the province. It did much to stimulate economic growth in Ontario.

Certainly the most significant contributor to the good showing of secondary manufacturing exports was our export of automobiles and parts, related directly to the Automotive Free Trade Agreement. Accounting for almost one-quarter of Canada's secondary manufacturing exports, they almost doubled within the period of one year.

TABLE III

PER CENT INCREASE IN CANADIAN AUTOMOTIVE EXPORTS, 1965/1964

(January-October Periods)	
	% Change, 1965/64
Passenger autos and chassis.....	105.8
Other motor vehicles.....	22.3
Motor vehicle engines and parts....	61.7
Motor vehicle parts, except engines	102.2
Total motor vehicles and parts....	89.4

Source: DBS, *Summary of Exports*, October 1965.

Not as significant in quantity but still important were exports of combine reaper-threshers and parts, up almost 25 per cent, and communications equipment, up more than 40 per cent.

A factor instrumental in making the merchandise trade balance somewhat disappointing in 1965 was the rising value of merchandise imports. Whereas exports expanded only slowly, imports increased at a considerably higher rate. In the January to August period of 1965, total merchandise imports — at a level of \$5.5 billion — were 11.4 per cent higher than in the corresponding 1964 period. Major reasons for this were the record levels of investment in machinery and equipment (increasing such imports by about nine per cent) and the rise in motor vehicles and parts imports.

Stimulated by the Automotive Agreement and by increased affluence in Canada, imports of motor vehicles in the first eight months were 50 per cent higher in 1965 than they had been in 1964. Engines and parts were up over 15 per cent. To a considerable extent the high level of imports reflected the general prosperity prevalent throughout most of Canada.

Manufacturing Production

Manufacturing production rose by an estimated eight per cent in 1965. By far, the more significant contributor was durables manufacturing, increasing by over 12 per cent. Non-durables rose approximately four per cent.

With almost all of Canada's motor vehicle production coming from Ontario, the growth of this production played a large part in the good showing of Ontario durables manufacturing. In 1965 over 854 thousand motor vehicles were produced, an increase of some 27 per cent over the previous year. Automobile production alone was approximately 710 thousand units.

The demand for other products such as refrigerators, television sets and radios — fostered by higher incomes — also contributed to the gains in durables production. In addition, heavy investment produced a significant increase in the iron and steel products sub-division of the durables group. Table IV, based on nine month averages, shows the percentage change in manufacturing production from 1964 to 1965.

Ontario's total manufacturing shipments in 1965 were valued at \$17,640 million, approximately 52

TABLE IV
ONTARIO INDEXES OF MANUFACTURING PRODUCTION*, 1963-1965

<i>(January-September Averages)</i>					
	1963	1964	1965	1964/63	1965/64
	1956 = 100			% Change	
Total selected non-durables	125.1	136.0	141.8	8.7	4.3
Foods and beverages	119.3	129.0	133.0	8.1	3.1
Rubber products	119.8	134.4	136.3	12.2	1.4
Leather products	118.7	126.3	119.2	6.4	-5.6
Textiles	119.2	131.3	142.0	10.2	8.1
Paper products	121.2	131.8	140.9	8.7	6.9
Printing and publishing	111.8	118.2	121.4	5.7	2.7
Chemical products	155.9	171.0	183.0	9.7	7.0
Total durables	113.3	128.1	141.2	13.1	10.2
Wood products	116.8	124.0	128.5	6.2	3.6
Iron and steel products	116.8	130.5	142.3	11.7	9.0
Transportation equipment	108.5	134.1	154.2	23.6	15.0
Non-ferrous metals	109.2	118.3	128.1	8.3	8.3
Electrical apparatus	109.7	118.7	132.2	8.2	11.4
Non-metallic mineral products	125.4	139.8	148.9	11.5	6.5
Total manufacturing	118.1	131.3	141.5	11.2	7.8

*Excludes clothing, tobacco, products of petroleum and coal, and miscellaneous manufacturing.
Source: Ontario Department of Economics and Development.

per cent of all Canadian shipments. Over 55 per cent of Ontario's shipments were manufactured durables, with an estimated value of \$9,870 million. Durables shipments increased by over 12 per cent from 1964 to 1965; in the rest of Canada they grew only 4.9 per cent.

Construction

Activity in Ontario's construction industry — particularly business construction — reflected the optimistic attitudes prevailing in the economy. Anticipating expanding production and capacity requirements, the business community invested record amounts on new buildings and facilities. Throughout the year this type of construction was the most significant.

So intense were the demands made on this industry that skilled labour and materials shortages developed. Wholesale prices for building materials rose over five per cent, while average hourly earnings in the construction industry rose seven per cent. At mid-year the Government of Canada announced that certain of its construction programs were to be postponed in order to ease the situation. The business community was asked to co-operate by similarly delaying construction wherever possible. While pressures remained fairly strong for some time, they did ease somewhat toward the end of the year.

Indicative of the growth of the construction industry was the impressive growth of employment — up between 11 and 12 per cent in Ontario, around eight per cent in the rest of Canada.

Construction contract awards in Ontario reached \$2,145.6 million in 1965, an increase of 19.1 per cent over 1964. Throughout most of the year, as well, the value of building permits was about 20 per cent higher than one year earlier. Housing starts, running about 14 per cent higher most of the time, declined relatively in November to cut the gain for the eleven-month period to less than six per cent.

Finance

Canada's Gross National Product rose from \$47.0 billion in 1964 to an estimated value of \$51.4 billion in 1965, an increase of approximately 9.2 per cent. In real terms this gain exceeded six per cent. Increased capital investment, rapidly rising output in the manufacturing industries, high levels of consumer spending and increased Canadian exports all contributed to this good performance. The resulting higher incomes made available increased savings for domestic capital investment purposes.

New Canadian bond financings amounted to \$4.7 billion in 1965, some 2.7 per cent below the 1964 level. Borrowings in the United States, meanwhile, rose by one-third, reaching a level of almost \$1 billion. Throughout most of the year U.S. long-term capital flowed into Canada without interruption, both from security issues marketed in the U.S. and from direct investment. But in the last months of the year Canadian access to American capital was restricted. In line with President Johnson's balance of payments program, American subsidiaries curtailed their direct investment, and Canadian borrowers were requested to delay further placements in the New York market.

At the end of November, Canada's holdings of gold and U.S. dollars amounted to \$2.665 billion. Contributing to this high level of reserves were the sizeable receipts from wheat sales abroad. To maintain its exemption from the U.S. Interest Equalization Tax, Canada had agreed to hold its official reserves (including credits with the I.M.F.) not appreciably above the July 1963 level of \$2.5 billion. Consequently the Bank of Canada announced near the end of the year that, if necessary, it would repurchase Canadian securities marketed in the United States in order to bring our reserve position back into line.

In the latter half of the year there was a movement in the direction of tighter money. The expanding need for funds in both the public and private sectors, coupled with diminishing availability, tended to exert pressures for higher interest rates. These pressures existed for some time prior to the December increase in the U.S. Federal discount rate and in the Canadian rate. Throughout 1965 prices on the Canadian bond market declined steadily as yields rose. An example was a long-term Government of Canada bond priced to yield 4.81 per cent at the end of January. At year-end its price had declined so as to yield 5.48 per cent.

In the first half of 1965 bullishness in the securities market continued unabated, following the trend of recent years. However at mid-May a downward movement began in response to a variety of apprehensions. The market declined further with the collapse of the Atlantic Acceptance Corporation. From an all-time closing high of 178.05 (1956 = 100) on May 14, the Toronto Stock Exchange Industrial Index fell to a 1965 low of 157.11 on July 26. After that, the upward movement was hesitant: the Index closed the year at 168.56, only slightly ahead of the 1965 opening level of 166.04.

The trend toward tighter monetary conditions in the economy, combined with the Atlantic collapse

and more limited access to foreign funds, had a restraining effect on the value of the Canadian dollar. Opening the year at a level of US 93.14 cents, it declined as low as US 92.28 cents before recovering to close the year at US 93.03 cents.

Employment

The economic expansion experienced in the past five years produced very significant changes in the employment picture in Ontario. Unemployment as a percentage of the labour force declined from an average of 5.4 per cent in 1960 to 3.2 per cent in 1964 and 2.5 per cent in 1965. For Ontario the 1965 figure represented the best situation since 1956, and compared favourably with the 1965 Canadian average of 3.9 per cent. On a single-month basis the 1.8 per cent level reached in October 1965 was the lowest since 1953.

Total employment rose by 3.0 per cent in 1965, creating 75,000 new jobs. At the same time the size of the labour force increased from 2,556 thousand in 1964 to 2,614 thousand, an increase of 2.2 per cent.

Table V gives a general idea of the increase in the index of employment in different industrial groups for the Province of Ontario as a whole.

TABLE V
PER CENT INCREASE IN THE INDEX OF
EMPLOYMENT IN ONTARIO INDUSTRIAL
GROUPS, 1965/1964

(January-September Periods)	
	% Change, 1965/64
Forestry	6.5
Mining	2.7
Manufacturing	4.7
Construction	11.0
Transportation, storage and communication	2.8
Public utility operation	0.8
Trade	5.1
Finance, insurance and real estate	4.6
Service	9.3
Industrial composite	5.1

Source: Derived from DBS, *Employment and Payrolls*, September 1965.

Although there were shortages of skilled, managerial and professional workers in certain industries, labour markets in Ontario were generally balanced in 1965. Economic buoyancy considerably reduced unemployment in many areas.

However, this was not the case everywhere in Ontario. Certain urban areas experienced labour surpluses at certain times of the year. At the beginning of 1965 there was a surplus in Bracebridge due to the seasonal decline in tourism — one of its major industries. In February and March, Cornwall was faced with an excessive supply of labour. This was very likely due to seasonal cut-backs in industrial employment. In fact, that area had experienced heavy seasonal unemployment for years, particularly after the completion of the St. Lawrence Seaway. The only other area to experience a labour surplus for a time was Oshawa. August and September lay-offs in the automobile industry, prior to the introduction of the new models, temporarily upset the labour market balance there.

Several centres had labour shortages in 1965. Manufacturing production at Woodstock, enjoying one of its best years, took up the available labour in that centre. An extremely active furniture industry accounted for shortages in Stratford and Listowel. In general the shortages in Stratford and Woodstock were occasioned by high levels of light manufacturing activity in those general areas. In Walkerton it was due to the Douglas Point Nuclear Power Station.

Elsewhere in the province, labour markets were relatively well-balanced, with seasonal factors accounting for any minor divergences.

Income

Labour income in the province increased by about 10 per cent in 1965, due to the combined effects of increased employment and a substantial rise in the average level of wages and salaries. During September, for example, average industrial wages and salaries were almost 4.5 per cent higher than twelve months earlier. The construction industry led with a 9.3 per cent increase; finance, insurance and real estate followed with 5.9 per cent, while mining was up 5.7 per cent. While service industries rose 5.6 per cent, manufacturing industries were reported to be up 3.6 per cent.

On a *per capita* basis personal income in Ontario rose by an estimated 6.6 per cent to a level of \$2,264. With Ontario's population in 1965 up 2.2 per cent from the previous year to a level of 6,731 thousand, total personal income was an estimated \$15.2 billion.

Sales

Ontario's retail sales in 1965 were over seven per cent higher than in the previous year. Strong increases were noted for motor vehicle dealers (over

13 per cent), variety and selected food and beverage stores (both almost 12 per cent), jewellery stores (over nine per cent), and shoe, hardware, and men's and women's clothing stores (all close to eight per cent). Automobile sales, based on January to October data, were up 12.0 per cent in Ontario compared with an 8.2 per cent increase in the rest of Canada. Aside from rapidly rising incomes, the other factors leading to increased auto sales were rising scrap-page rates and increased family formation.

Mining

The total value of mineral production in Ontario rose to \$986.2 million in 1965, according to DBS preliminary estimates. This represented an increase of 9.4 per cent over the revised 1964 figure of \$901.6 million. Accounting for over 76 per cent of this total value was the value of mineral production, at \$780.7 million.

TABLE VI
ONTARIO PRODUCTION OF
SELECTED METALS, 1964-1965

	1964	1965	1965/64
	\$ Million		% Change
Nickel	267.8	319.8	19.4
Copper	131.5	163.9	24.6
Iron ore	85.6	90.6	5.8
Gold	81.4	73.3	— 9.9
Uranium (U ₃ O ₈)	63.6	49.2	—22.7
Platinum group	25.4	35.7	40.4
Zinc	20.4	18.1	—11.4
Silver	13.9	15.7	12.7
Magnesium	5.6	6.7	19.9
Cobalt	4.3	6.0	40.0
Total metals	701.3	780.7	11.3

Source: DBS, Preliminary Estimates.

Most notable in terms of total value were the significant increases of 19 per cent and 25 per cent in nickel and copper production. The platinum group also displayed a sizeable increase. These three metals were closely associated in the Sudbury ores, and their increases reflected the greatly increased activity in that area. Uranium production declined because of the limited market for it. Gold dropped 10 per cent, largely because of the fixed price for gold, rising production costs and declining economic ore reserves.

Non-metallic minerals declined by 3.1 per cent to a 1965 level of \$20.8 million, mainly because Ontario's only major asbestos producer ceased pro-

duction. On closing its Munro Mine, near Matheson, the Johns-Manville Company converted its mill to testing the company ores from Reeves Township.

Structural materials were valued at \$174.9 million, up 3.5 per cent from 1964. Sand and gravel rose 4.0 per cent to a level of \$56.8 million, while cement and clay products increased by 8.1 per cent and 6.8 per cent respectively.

New developments in mining included the start of construction of a \$40 million iron ore pelletizing complex at the Sherman Mine at Temagami, and a milling and concentrating plant near Timmins. Construction plans announced in 1965 included mining and concentrating facilities near Fort Frances and a \$50 million pelletizing plant at Bruce Lake.

Agriculture*

Farmers in Ontario experienced a good year in 1965, increasing cash receipts from the sale of farm products by an estimated 7.5 per cent. Based on this estimate, such receipts exceeded \$1 billion for the first time.

1965 was an unusual year with respect to the prices of several products. Strong prices for many farm products in the United States increased prices here, in spite of larger marketings. Based on the index of farm prices for Ontario agricultural products in the first three-quarters of 1965, prices rose by 5.8 per cent.

Production of grain crops increased 7.5 per cent over 1964. All main grain crops were larger with one exception: winter wheat declined by 27 per cent — from 18 million to 13 million bushels — because of a severe winterkill. Barley production rose 34 per cent.

Flue-cured tobacco production rose by 25 million pounds to an estimated total of 162 million pounds. Expected average prices of 60 cents (compared with 55 cents last year) promised to increase farm income by about \$25 million. This strength in the market for tobacco was related to the political situation in Rhodesia: normally Rhodesia had been an important supplier of flue-cured tobacco to Western Europe and the United Kingdom.

In livestock and poultry significant increases in marketings were noted. Beef carcass gradings rose 14 per cent, turkey production 20 per cent, and chicken broiler production six per cent. Hog marketings were down for the first eleven months of the year.

In terms of price, all meats in Canada benefited

*Prepared by the Farm Economics, Co-operatives and Statistics Branch, Ontario Department of Agriculture.

from the strong American market for red meats. The average price of good steers was down 36 cents to a level of about \$23. Hog prices throughout most of the year were \$5 higher at \$31.25; toward the end of the year, however, they rose to a record \$43. Turkey prices were below the previous year, while the price of broiler chickens remained slightly higher.

In egg production the extremely low prices at the beginning of the year resulted in a severe cutback in replacement pullets; as a consequence egg production dropped in the autumn and prices increased rapidly.

Milk production for the first nine months increased by 2.2 per cent, while concentrated milk products increased five per cent and cheddar cheese production rose six per cent. The production of creamery butter was one per cent below 1964, leaving the possibility that there would be a short supply in the next six months — a change from the substantial butter surplus that existed two years earlier.

In 1965 wholesale and retail prices of all milk products were higher. Butter rose six per cent, cheese 10 per cent, and skim powder milk 12 per cent.

Ontario fruit production in the past year, with the exception of grapes and plums, was below 1964 levels. Apples and sour cherries declined 19 per cent and 26 per cent respectively. While grape production was good, rising 10 per cent, serious marketing problems were experienced. Because of a heavy American crop, Ontario grape exports were only able to enter the U.S. market at very low prices.

Vegetables for processing were available in good volume, although some frost damage occurred in sweet corn and wax beans. Ontario potato production was approximately the same as in 1964.

Forest-Based Industries

During 1965 Ontario's pulp and paper industry moved ahead strongly, remaining one of the province's five leading manufacturing industries. Newsprint sales rose by approximately five per cent to a level of \$214 million, while pulp sales grew by approximately six per cent, reaching a level of \$140 million. Canadian newsprint mills operated at a production ratio of 91.4 per cent, the highest since 1957.

The above gains were made possible by a worldwide increase in demand for these items and by Canada's increased penetration of overseas markets. The latter development came about as a result of the growing inability of many European countries — formerly exporters of pulp and paper — to meet even their own rapidly increasing requirements.

The pulp and paper industry sought to cope with the problems occasioned by stable or falling prices and higher raw material and labour costs by intensifying its efforts to develop more efficient production techniques. Notable successes were recorded in the wood-chip pipeline and pulping fields. The developments in the former area were of particular significance since they promised, under favourable conditions, to reduce the cost of woods operations by approximately 50 per cent.

Modernization and expansion plans requiring the expenditure of approximately \$120 million were announced by the province's pulp and paper producers during the year. In many cases actual work was not to begin until 1966.

The lumber industry also fared well during the year. Lumber sales increased by almost six per cent, largely as a consequence of the continued province-wide upsurge in construction activity. The value of lumber sales in 1965 was \$35 million.

ONTARIO ECONOMIC INDICATORS - SEASONALLY ADJUSTED

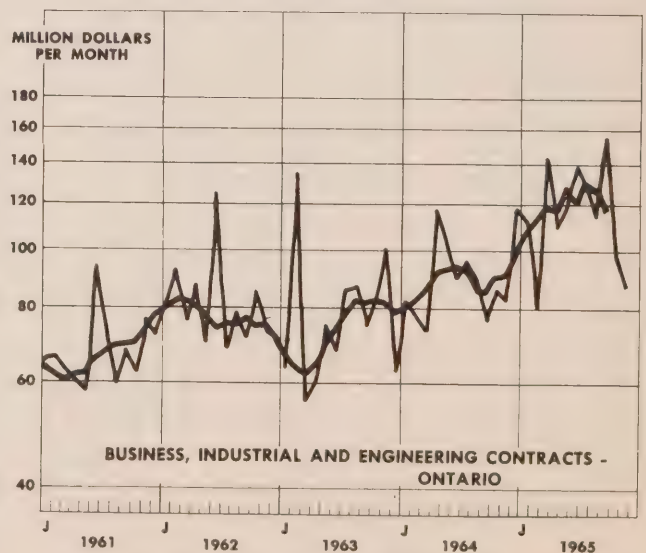
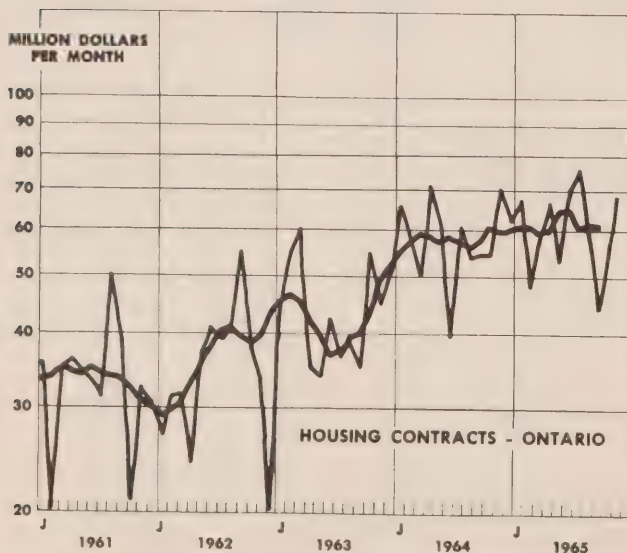
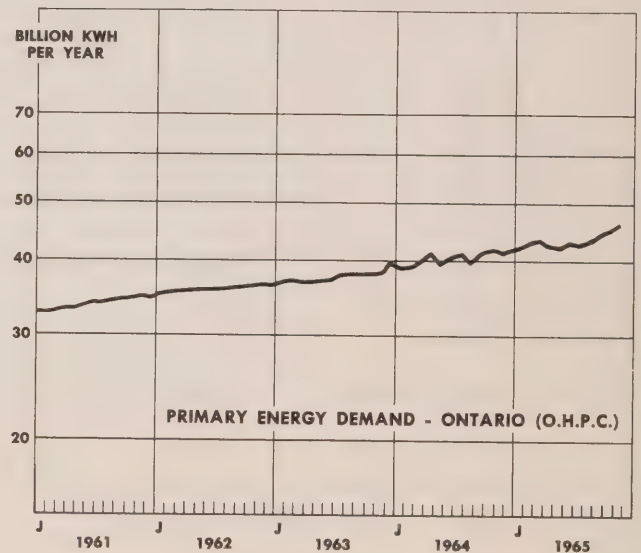
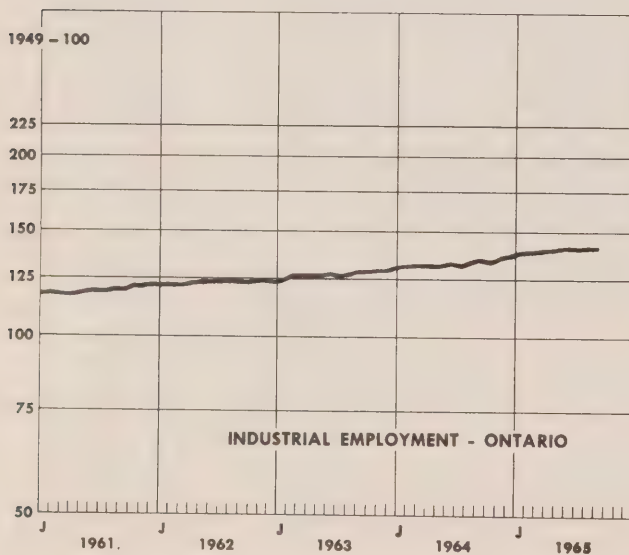
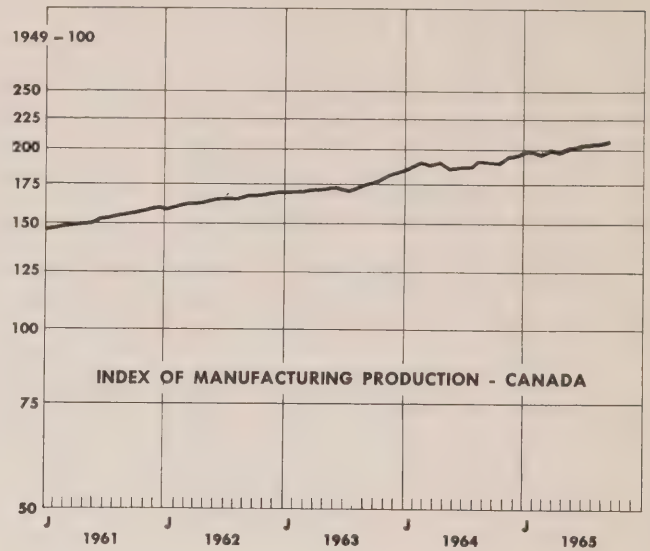
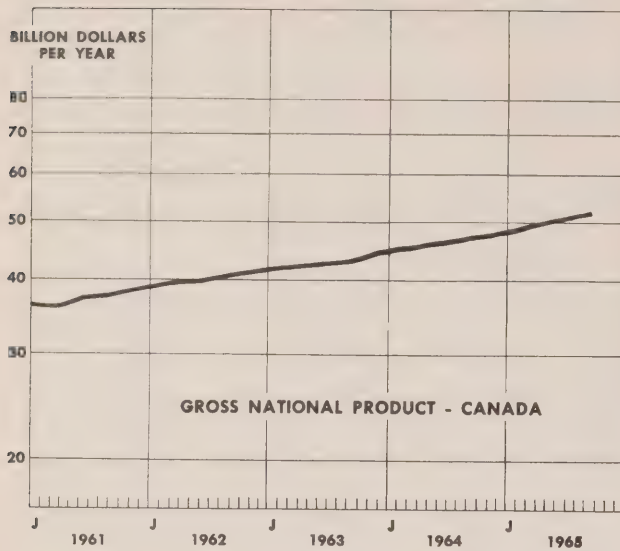
(* Figures for Canada)

1964 - - - - - 1965 - - - - -														
LEADING INDICATORS														
	October	November	December	January	February	March	April	May	June	July	August	September	October	November
Average Weekly Hours Worked in Manufacturing	(No.)													
New Dwelling Unit Starts	41.4	40.8	41.1	41.0	40.3	41.7	41.5	41.0	41.3	40.8	40.9			
Business Failures	5,209	6,183	5,138	4,107	5,815	5,353	3,848	5,010	5,806	4,770	7,377	4,464	3,764	
Business Failures - Liabilities	93	59	78	90	77	130	67	87	65	63	83	79	70	71
New Orders in Manufacturing*	6.9	3.1	2.1	3.4	10.3	8.9	4.0	5.3	4.6	4.0	20.7	9.5	2.6	3.4
Housing Contracts	2,689	2,721	2,780	2,684	2,793	2,870	2,827	2,834	2,829	2,849	2,909	2,822		
Business, Industrial and Engineering Contracts	54.4	70.8	62.5	67.9	48.1	57.9	67.3	53.7	70.9	76.2	59.1	44.3	56.6	68.9
Money Supply*(1)	86.1	83.1	117.9	113.5	80.3	143.9	109.3	117.9	135.9	127.8	115.0	155.7	98.1	87.6
T.S.E. Index - 77 Stocks	17,426	17,537	17,645	17,855	18,065	18,289	18,557	18,683	18,716	19,172	19,639	19,654	19,786	19,737
	169.7	168.5	165.6	170.9	172.8	170.7	171.1	169.5	163.0	163.9	166.8	171.4	174.2	167.7
COINCIDENTAL AND LAGGING INDICATORS														
New Dwelling Unit Completions	3,806	3,432	3,236	3,667	3,727	8,392	7,115	4,518	4,019	2,153	4,075	3,269	2,830	
Average Hourly Earnings in Manufacturing	2.14	2.14	2.15	2.19	2.20	2.23	2.23	2.22	2.23	2.23	2.23			
Gross National Product*														
Cheques Cashied in Clearing														
Centres	3,820	3,678	3,765	3,773	3,869	3,981	4,127	4,211	4,097	4,184	4,634	4,287		
Retail Trade	630	625	624	617	631	641	659	672	665	672	669	667		
Labour Force	2,561	2,564	2,565	2,614	2,590	2,598	2,597	2,603	2,635	2,634	2,641	2,600	2,586	2,616
Employed	2,467	2,491	2,489	2,543	2,525	2,540	2,524	2,531	2,553	2,561	2,572	2,531	2,539	2,557
Unemployed	94	73	76	71	65	58	73	72	82	73	69	69	47	59
Unemployed as % of Labour Force	3.7	2.8	3.0	2.7	2.5	2.2	2.8	2.8	3.1	2.8	2.6	2.7	1.8	2.3
Wages and Salaries	798	806	808	825	823	843	849	854	861	868	874	885		
Industrial Employment	133.6	136.1	136.8	137.9	138.2	139.3	139.8	140.1	140.5	140.7	140.9	142.3		
Total Industrial Production*	215.1	220.9	221.1	224.3	223.1	226.7	225.5	225.4	225.9	228.5	232.0	233.4		
Total Manufacturing	189.1	194.5	194.4	197.2	195.9	199.4	198.2	200.3	200.2	203.1	204.8	205.4		
Non-Durables	187.1	191.0	192.7	191.4	189.8	188.9	189.3	193.2	190.9	194.6	195.7	196.8		
Durables	191.4	198.6	196.4	203.9	203.1	211.8	208.6	208.5	211.1	213.1	215.6	215.4		
Mining	326.7	341.2	338.1	348.3	343.3	347.5	348.7	332.7	336.9	339.3	350.7	353.2		
Electric Power & Gas Utilities	426.9	421.8	434.1	429.6	437.4	441.8	435.8	431.8	433.5	431.6	449.8	462.6		
Primary Energy Demand (Annual Rate) HKWH	41.81	41.29	41.72	42.13	42.86	43.46	42.52	42.14	43.06	42.59	43.67	44.51	44.98	46.11

ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED*

Domestic Exports	\$ Million	669.9	706.5	714.1	569.1	538.3	685.5	645.0	717.6	770.4	685.7	701.0		
Imports for Consumption	\$ Million	636.8	673.2	656.1	559.6	551.1	730.0	698.4	737.1	732.4	659.4	734.9		
Foreign Exchange Reserves	US \$ Million	2,687	2,713	2,674	2,668	2,649	2,554	2,567	2,480	2,492	2,598	2,614		
Prices, Industrial Materials	1935-39=100	258.9	258.5	256.2	256.7	255.3	256.3	256.6	260.4	259.5	260.9	260.4		
													2,644	2,681
													259.3	261.5

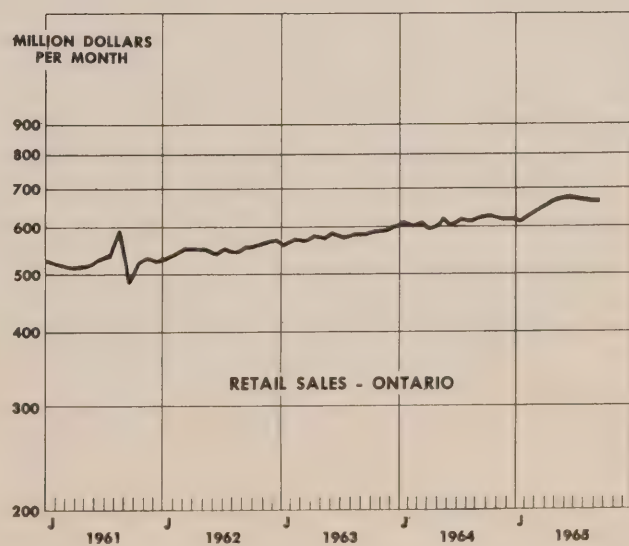
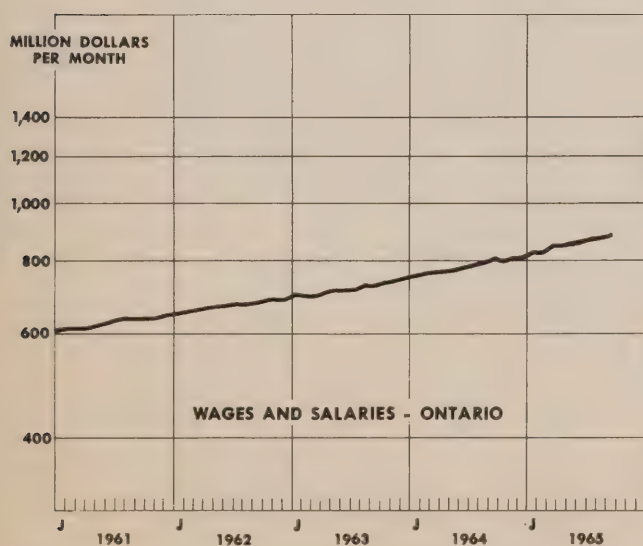
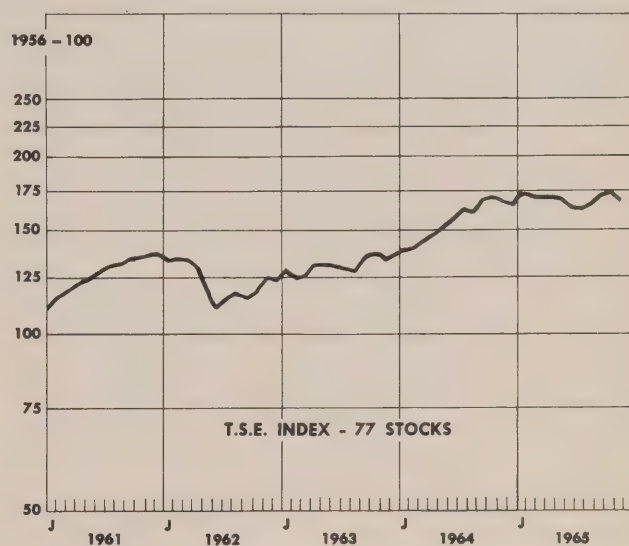
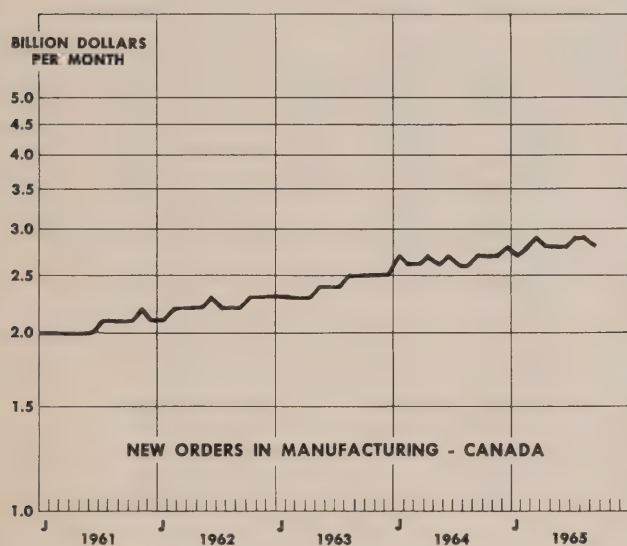
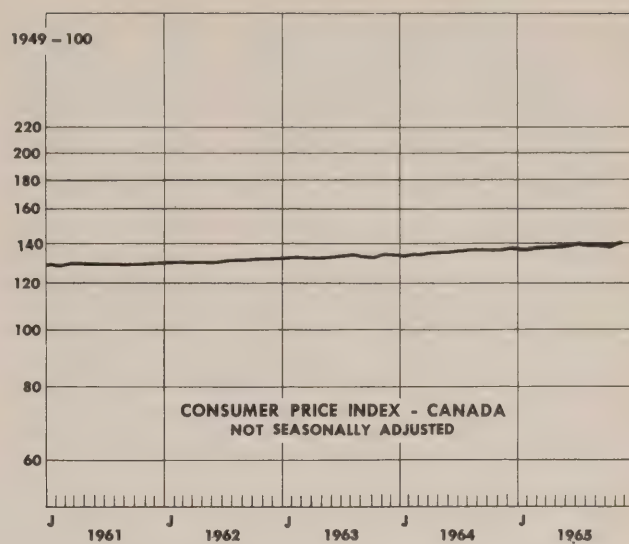
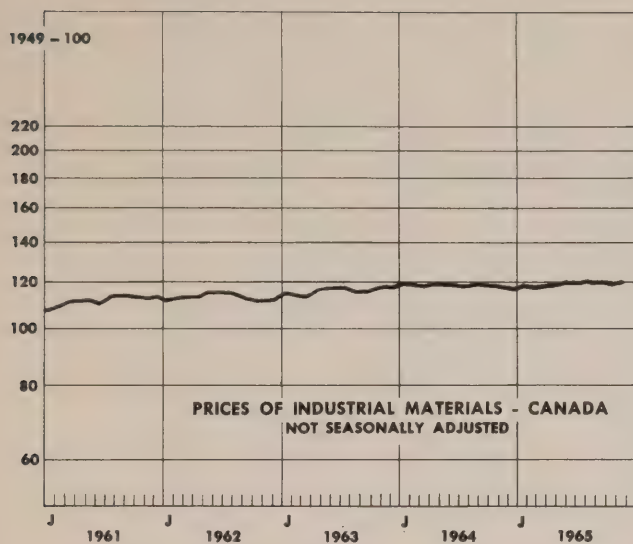
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



— TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



ONTARIO ECONOMIC REVIEW



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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

CONTENTS

The Ontario Economy	1
Opportunity Through On-the-Job Training, <i>Barry Appleby and Peter P. Ferlejowski</i>	5
Indicators and Charts	9

THE ONTARIO ECONOMY

Production

Canada's steel ingot production in the first two months of 1966 was 1,657.7 thousand tons, an increase of 7.2 per cent over the corresponding period last year. For the month of February alone, production was 790.6 thousand tons, ahead of last February by 8.6 per cent.

In January 85,751 motor vehicles were produced in Canada, 29.7 per cent more than January 1965. This substantial increase largely reflected the benefits accruing from the Canada-U.S. Automotive Free Trade Agreement, put into effect just over one year ago.

The seasonally-adjusted Canadian Index of Industrial Production (based on 1949 = 100) reached an all-time high of 242.2 in December. This 1.1 per cent increase from the previous month brought the December level 9.5 per cent ahead of December 1964. Durables manufacturing was the strongest component, with the rapid growth of motor vehicle production the dominant factor. A comparison of the December Index for 1965 and 1964 shows that mining rose 7.5 per cent, total manufacturing 10.1 per cent, and electric power and gas utilities 8.6 per cent. Durables and non-durables manufacturing were up 15.3 per cent and 5.6 per cent respectively.

ONTARIO INDEX OF MANUFACTURING PRODUCTION*, 1963-1965

(January-November Averages)

	1963	1964	1965	1964/63	1965/64
		1956 = 100		% Change	
Total selected non-durables	127.4	136.4	145.0	7.1	6.3
Foods and beverages	123.1	132.8	137.5	7.9	3.5
Rubber products	121.7	136.3	140.8	12.0	3.3
Leather products	119.9	126.5	108.3	5.5	-14.4
Textiles	121.6	133.3	144.9	9.6	8.7
Paper products	122.9	133.9	142.7	9.0	6.6
Printing and publishing	113.4	120.0	124.1	5.8	3.4
Chemical products	156.9	172.5	185.4	9.9	7.5
Total durables	115.6	129.2	143.8	11.8	11.3
Wood products	116.9	123.7	128.7	5.8	4.0
Iron and steel products	118.1	132.1	143.8	11.9	8.9
Transportation equipment	113.4	132.2	159.3	16.6	20.5
Non-ferrous metals	109.6	119.5	130.4	9.0	9.1
Electrical apparatus	112.5	122.1	135.0	8.5	10.6
Non-metallic mineral products	128.7	145.0	152.7	12.7	5.3
Total manufacturing*	120.4	133.0	144.4	10.5	8.6

*Excludes clothing, tobacco, products of petroleum and coal, and miscellaneous manufacturing.

Source: Ontario Department of Economics and Development.

On the basis of average figures for 1965 and 1964 there was an overall increase of 7.7 per cent in the Index of Industrial Production. Total manufacturing recorded exactly the same gain, durables rising 10.2 per cent, non-durables 5.5 per cent. Electric power and gas utilities grew as rapidly as durables manufacturing.

In Ontario the value of manufacturing shipments for 1965 was recorded at \$17,785.6 million — 52.2 per cent of Canada's \$34,101.2 million. The gain over last year was 10.2 per cent, greater than for any other province.

The Ontario Index of Manufacturing Production, first introduced in the October 1964 issue of the *Ontario Economic Review*, is shown on page 1 with figures for the first 11 months of 1965. Once again the impact of motor vehicle production on the transportation equipment component was the most outstanding feature.

Construction

Ontario recorded impressive gains in the value of construction contracts awarded in February. During that month awards were valued at \$140.3 million, more than 60 per cent higher than in February 1965, when the total was \$87.6 million. Spectacular increases in industrial and institutional construction accounted for most of the increase. The former group, mainly benefiting from expansion in manufacturing and processing plant capacity, grew from \$16.0 million to \$47.9 million; the latter, largely made up of school and college construction, went from \$16.2 million to \$41.9 million. Of the other construction groups, residential declined by about \$1.0

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

Location	\$ Million	Description
Brantford	2.1	School
Copper Cliff	6.0	Plant addition
Hamilton	3.1	Steel plant addition
Kitchener	20.0	Plant and office
Ottawa	15.0	Commercial complex
Peterborough	4.9	High school
Powasson	1.0	Home for aged
Preston	1.0	Plant
St. Thomas	2.8	School
Sault Ste. Marie	10.0	Steel plant expansion (initial work)
Scarborough Twp.	7.0	Hospital addition
Toronto	7.5	Apartments
Toronto	7.6	Housing
Windsor	1.0	Factory

Source: Southam Building Guide's Statistical Bulletin.

million to a level of \$31.2 million, business dropped about \$4.3 million to a level of \$8.7 million, and engineering edged up \$0.5 million to the \$10.6 million mark.

During February, "Big Jobs" in Ontario — those valued at \$1 million and over — amounted to approximately \$105.8 million. This represented more than 45 per cent of the national total. Some of the projects are listed in the accompanying table.

Cumulative figures for construction contract awards in 1966 place total awards at \$301.9 million, only 7.3 per cent ahead of the two-month total for 1965. A very strong first month last year — led principally by heavy public building and apartment construction — moderated the overall gain for 1966.

As a percentage of total value in the January-February period, institutional construction was highest with 27.6 per cent. Residential awards were next at 24.3 per cent, followed by industrial construction at 21.0 per cent. Engineering awards made up 18.2 per cent, with business construction smallest at 8.9 per cent.

In an apparent return to more normal seasonal patterns, Ontario residents stepped up housing construction in January. Compared with that month last year, starts were up 42.7 per cent, numbering 3,001 dwelling units. The number of starts in Hamilton moved up an impressive 130.9 per cent. In Toronto the 1,587 dwelling unit starts represented an increase of 69.7 per cent.

Dwelling unit completions, also particularly strong in Hamilton and Toronto, numbered 3,976 for the entire province — a gain of 46.7 per cent. Units under construction at the end of that month numbered 52,999, one-fifth more than a year earlier.

Eaton Centre

On March 1st plans were unveiled for Eaton Centre, a giant \$260 million six-building complex in downtown Toronto. Covering 22.5 acres of land adjacent to the new Toronto City Hall, the proposed Centre is to consist of a 69-storey office and apartment building, twin 57-storey office buildings, a circular 20-storey 500-room convention hotel, a nine-floor store and a 32-storey office tower. About one-half of the total area would be left as open public space, with walkways, landscaped areas and sculptures designed to complement the City Hall. Four underground levels would provide space for parking and for public transit.

The proposed Eaton Centre would be three times the size of Place Ville Marie and three and one-half times the size of the original Rockefeller Center. When completed it would house a working population of about 65,000 as opposed to 11,000 presently

in the area. In addition to the major structures there would be space for over 200 private shops. It is estimated that 200,000 people a day would visit the all-purpose work, recreational and cultural centre.

Plans for the development of the Centre require the partial removal of the old City Hall, according to Eaton Centre officials. Once it is acquired, construction would begin within six months. In the first phase — to last three years — the new store, one of the twin 57-storey office buildings and the hotel would be completed. The entire project is to take 15 years to complete.

Retail Sales

In keeping with the high level of economic activity prevalent throughout the economy, Ontario retail sales for 1965 reached a level of \$8,018 million, an increase of 8.2 per cent over the previous year. Sales rose faster than in all provinces with the exception of British Columbia. Ontario displayed particularly impressive growth in motor vehicle and jewellery store sales, moving ahead of 1964 by 16.0 per cent and 12.6 per cent respectively. Variety and selected food and beverage store sales both were up more than 11 per cent. And clothing and shoe stores as a group were generally about eight per cent higher than the previous year. While no category actually declined, sales of lumber and building material dealers and general stores were unimpressive, rising only 2.0 per cent and 0.7 per cent respectively.

On the national level the overall increase was 7.6 per cent, rising to a value of \$21,591 million. The most-rapidly growing businesses across Canada were generally the same as those growing fastest in Ontario.

Foreign Trade

According to preliminary figures of the Dominion Bureau of Statistics, total Canadian exports in January 1966 — including domestic exports and re-exports — were estimated at \$743.6 million, an increase of 26.7 per cent over the same month last year. To a considerable extent this large increase reflected the relatively low January 1965 level as well as the recent rapid growth of motor vehicle and parts exports. Exports to the United States, valued at \$416.9 million, were up 23.8 per cent, while those to the United Kingdom were 12.3 per cent higher at \$101.0 million. The modest 4.4 per cent increase for other Commonwealth and preferential rate countries was accompanied by a 51.6 per cent increase for all other countries. Wheat exports were apparently significant in the case of the latter group.

Complete 1965 data, based on actual domestic exports and estimated imports, indicate that imports

exceeded exports by \$115.6 million last year. Domestic exports were valued at \$8,523.0 million, a rise of 5.3 per cent over 1964; imports were estimated at \$8,638.6 million, up 15.4 per cent. Trade balances with the United States, the United Kingdom, and all other countries as a whole worsened in 1965.

While sales to the United States were up 13.3 per cent last year to a level of \$4,838.7 million, imports rose even more rapidly — by 17.1 per cent — to \$6,049.2 million. The resulting trade imbalance of \$1,210.5 million was over one-third greater than it had been the previous year.

Canada maintained a favourable balance of trade with the United Kingdom, but at \$554.4 million it represented a decline of over \$70 million from 1964. Unfavourable economic conditions in Britain, combined with its attempts to improve its own trade balance, led to a 2.1 per cent reduction in its purchases of Canadian goods. At the same time imports rose 8.0 per cent to \$620.0 million.

Smaller wheat shipments to communist countries in 1965 were responsible for the deteriorating export balance with all other countries of the world. Exports declined from 1964 to 1965, dropping 4.3 per cent to a level of \$2,509.9 million. Imports on the other hand rose 12.6 per cent, producing an export balance of \$540.5 million — almost 40 per cent less than the year before.

The breakdown of domestic exports shows that in spite of reduced wheat and wheat flour sales, exports climbed 5.3 per cent. (This incidentally was the minimum rate required to meet the 1970 goals of the Economic Council of Canada.) From the following table it is clear that inedible end products — exports of fully-manufactured non-food items — played an important role in accomplishing this.

1965 DOMESTIC EXPORTS OF CANADA

	Value in \$ Million	% of Total	% Change 1965/64
Live animals	79.1	0.9	129.3
Food, feed, beverages and tobacco	1,629.9	19.1	-9.7
Crude materials, inedible	1,763.4	20.7	9.1
Fabricated materials, inedible	3,728.8	43.8	6.5
End products, inedible	1,298.2	15.2	17.0
Special transactions-trade	23.5	0.3	-10.2
Total domestic exports	8,523.0	100.0	5.3

Source: DBS, External Trade Division.

Last year wheat and wheat flour exports declined 19.3 per cent; in falling to \$906.6 million these exports accounted for most of the decline in food, feed, beverages and tobacco.

Changes in the more-important crude material items were: iron ores and concentrates, up 1.4 per cent to \$360.8 million; nickel in ores, concentrates and scraps, up 14.0 per cent to \$189.3 million; and crude petroleum, up 6.8 per cent to \$280.0 million.

In fabricated materials there was a 4.2 per cent increase in newsprint paper, rising to \$869.6 million, while wood pulp and similar pulp rose 7.1 per cent to \$493.5 million. Softwood lumber increased a scant .18 per cent, attaining a level of \$458.0 million.

What stirred the export picture more than anything else was the dramatic increase in end products — primarily motor vehicles and parts. In just one year the level of motor vehicle and parts exports climbed 99.6 per cent, mainly because of the stimulating effects of the Canada-U.S. Automotive Free Trade Agreement. These exports rose from \$177.4 million in 1964 to \$354.0 million in 1965. Passenger automobiles and chassis, at \$148.6 million, were 119.7 per cent higher.

Aside from these inedible end product exports, there were also impressive increases in communications and related equipment, up 36.3 per cent, and combine reaper-threshers and parts, ahead by 27.1 per cent. Their values in 1965 were \$70.8 million and \$85.7 million respectively.

Finance

Activity on the Canadian bond market was stimulated in January with the announcement of a \$300 million three-part Government of Canada refunding issue. The issue was immediately over-subscribed, with buyers giving special attention to bonds having short-term maturities. As a result of this operation, bond prices, which had remained virtually unchanged during the month, experienced a downward movement — particularly in the short end of the market. This trend to lower prices and higher yields was maintained during the remainder of January and throughout February.

New debt financings by provinces, municipalities and corporations opened the year at a fast pace, with a significant proportion raised in the United States market. By January 15th the value of new issues placed or delivered in the United States totalled approximately \$306 million — 32 per cent of all Canadian issues placed in the United States during the whole of 1965. To some extent this development was accounted for by the delivery early in January of placements which had been deferred during the latter part of 1965. It is likely that the rate of borrow-

ing in the United States was spurred by apprehensions that access to this market might be restricted during 1966.

A tendency to lower prices on the provincial bond market was maintained during February. Two new \$50 million issues by the Provinces of Ontario and Quebec highlighted activity in that market. A number of new issues came to the municipal bond market, particularly in February when Metropolitan Toronto offered a new issue amounting to \$34.4 million. The corporate sector was also active with Bell Telephone Company of Canada placing a \$40 million issue. Prices in both the municipal and corporate sectors tended to be off fractionally during February.

Demand and supply conditions on the “day-money” market reflected generally tighter credit conditions. These funds were in relatively short supply, with the interest rate on loanable funds fluctuated between $4\frac{1}{4}$ per cent and $4\frac{3}{8}$ per cent during January. Although pressure on these funds eased slightly in the first week of February when the “day-money” rate declined to $3\frac{1}{2}$ per cent, this situation proved only temporary and during the remainder of the month the rate fluctuated narrowly at about $4\frac{1}{4}$ per cent. A movement to tighter credit conditions in Canada was reflected in the average tender yield on 91-day Canada Treasury Bills, which moved from 4.58 per cent on January 6th to 4.69 per cent on February 24th. It can be anticipated that the yield will increase in the weeks ahead.

The trend toward increased activity and price advances which was evident on Canadian stock exchanges during the latter part of 1965 carried through into January 1966. However, at the beginning of February price declines set in, along with accompanying selling pressures. The Toronto Stock Exchange Industrial Index recorded its longest sustained decline since the 12-day decline ending November 23rd, 1965. The market firmed somewhat at month-end and the Index closed at 170.06.

Canada's foreign exchange reserves in gold and U.S. dollars amounted to \$2,562.4 million on January 31st, 1966, compared to \$2,664.5 million at the same period last year. This change must be assessed in the light of Canada's objective of keeping in line with the requirements of the U.S. equalization exemption “agreement”.

NOTE: Commencing with this issue the economic indicators at the back of the Ontario Economic Review are being charted on an arithmetic rather than semi-logarithmic scale.

Opportunity Through On-the-Job Training

BARRY APPLEBY and PETER P. FERLEJOWSKI

Economists, Research Branch

ONTARIO DEPARTMENT OF LABOUR

Rapid industrial change has placed new emphasis on education and training as means of facilitating labour market adjustments. The Province of Ontario, aware of the need for a well-qualified labour force, is making major efforts in this direction. Basic educational programs are being improved and made more readily accessible to people of all ages; and a wide range of vocational and on-the-job training is being undertaken by the Ontario Departments of Education and Labour.

In 1963 "The Select Committee on Manpower Training" of the Ontario legislature reported on measures that could be taken by government, industry and labour to improve training programs. In response to the Committee's findings the Department of Labour early in 1965 re-defined its training objectives as follows:

- (i) To most efficiently help industry fill the skill gap and stimulate sound economic growth;
- (ii) To open new employment opportunities for young people through on-the-job training;
- (iii) To anticipate and meet the economy's rapidly changing manpower requirements;
- (iv) To help meet the challenges and problems associated with technological, economic and social change.

THE TRAINING ARRANGEMENTS

These objectives are now being achieved through a program of apprenticeship and short-term on-the-job training carried out by the newly established Industrial Training Branch.

Apprenticeship

In October 1964 *The Apprenticeship and Tradesmen's Qualification Act* put into effect some of the recommendations of the 1963 Select Committee. As a consequence, apprenticeship training is now available in more than 100 trades, with programs developed or revised to meet present-day needs.

Apprentices get most of their training in work situations. But they also spend several weeks in day classes at Provincial Trade Schools operated by the Department of Education. During the time away from the job, the apprentice is given a subsistence allowance, tuition fees and transportation costs, of which 50 per cent is contributed by the Government of Canada and 50 per cent by the Province.

To make apprenticeship more attractive, a system is in effect in some trades giving credit toward journeyman status for academic achievement. By lifting the upper age limit at which training may begin, older workers are encouraged to add to their skills and become tradesmen. In addition, the Industrial Training Branch is reviewing and revising its apprenticeship programs to ensure that they meet present-day skill requirements.

The new approach has been in effect too short a time to indicate what impact it will have on apprenticeship training in Ontario. However, the number of active apprentices in the province at the end of February 1966 was 12,338, compared to 9,813 at the end of March 1965, an increase of 20.5 per cent in 11 months.

Short-Term On-the-Job Training

Not all jobs, of course, call for fully-trained journeymen. Often workers are needed with just one or two specific skills. Therefore, short-term training — lasting from two weeks to two years — has been added to the Industrial Training Branch's program. Whenever possible, skills are taught on a block-building basis, so that trainees in these shorter courses have the opportunity of acquiring related skills at a later date. Then, if they wish to become apprentices, they may be given credit toward journeymen status for what they have already learned.

Depending upon the complexity of the skill, short-term on-the-job training may be supplemented by home study courses or classroom instruction. When this need arises, courses are arranged in co-operation with the Ontario Department of Education at a nearby school; where a skill is more complex, this is carried out at the nearest Provincial Institute of Trades.

These arrangements extend the apprenticeship principle into shorter term training in industry; and they divide responsibilities between the Departments of Education and Labour in a manner similar to that existing under the apprenticeship system.

The federal *Technical and Vocational Training Assistance Act* of 1960 and agreements with the provinces implementing it have been a major stimulus to this program through provision of financial aid for "... any form of instruction, the purpose of which is to prepare (a person) for entry into gainful employment in any primary or secondary industry or

service occupation, or to increase his skill or proficiency therein."

As for apprenticeship, the costs of short-term training programs are shared by employers and the federal and provincial governments. These shares are determined in accordance with previously established guidelines. For the training of existing staff, the governments pay technical assistance costs and reimburse the employer for salaries paid to instructors. For training unemployed and unskilled persons on the job the governments assume, in addition, part of the wage costs. In all cases, companies are expected to contribute a substantial share of the cost of training.

The shares that are actually borne by employers and government are determined on the merits of each case. The output attained from the trainee while in training varies greatly from one skill or occupation to another, and has an important bearing on the cost-sharing formula adopted. Examples of cost-sharing arrangements are outlined in the following sections of this paper presenting case studies of short-term on-the-job training.

THE PILOT SHORT-TERM TRAINING PROJECT

The Industrial Training Branch received its first request for assistance in implementing a short-term on-the-job training program from a Toronto firm producing a high fashion, quality line of ladies' garments.

The company employed about 300 people and has extensive expansion plans for the near future. Like the rest of the garment industry, it had been affected by the critical shortage of skilled sewing machine operators. Therefore, the objective of the pilot project was to graduate 20 such operators and design a viable format for future on-the-job training projects in the garment and other industries.

Profile of the Trainees

With the cooperation of the National Employment Service an active recruiting program was carried out. Due to the informal nature of the labour market and hiring procedures in the garment industry, about one-half of the 45 recruits were referred by the Service. The firm accepted the remainder from among applicants who came directly to the factory for employment, many having been referred there by friends or relatives working for the company.

From National Employment Service information, it is apparent that some important characteristics of the trainees were:

- (i) They were non-English-speaking recently landed immigrants;

- (ii) They were almost completely unskilled and inexperienced;

- (iii) Most were young and unemployed.

The Program

The project began in early March, 1965, using two instructors who were ordinarily supervisors in the company. For purposes of the project they were detached from their regular duties and paid by the government during the training period.

The program was broken into three phases, with each trainee moving from one phase to a more advanced phase as soon as the necessary knowledge, skill and speed had been acquired. The only restriction was that the total training time would not exceed 10 weeks.

The trainees were paid the minimum wage of one dollar per hour, wage costs being shared equally by the firm and the two levels of government. The federal portion of the governmental share was 75 per cent, the provincial portion 25 per cent. Production returns accrued 100 per cent to the company, while training costs other than wages were borne by the two governments.

Some Results of the Pilot Project

The results of the training were shown in the progressive increase in output of almost all of the trainees. Upon graduation, each trainee was taken out of the course to work on piece rates.

The *average* value of output per hour for the entire group of trainees increased 47¢ in the first seven weeks of training. The averages are tabulated below:

<u>Week of Training</u>	<u>Value of Output Per Hour</u>
1st	19¢
2nd	30
3rd	31
4th	37
5th	51
6th	56
7th	66

Early in December, 1965, those graduates still with the firm earned an average weekly wage of \$66.40.

Follow-Up on Trainees of the Pilot Program

Of the original group of 45 trainees there were 20 graduates. At mid-January, 1966, 14 of these were still employed at the firm and on piece rather than hourly rates.

Among those no longer with the firm at that time, 16 (6 graduates and 10 non-graduates) were still employed within the industry. They left the company for a variety of reasons, the chief ones being

their greater earning potential and employability resulting from the training.

Eight of the trainees left the labour force altogether because of sickness or pregnancy. No information was available on the remaining seven who began the course. They left the training program after only one or two weeks and did not elicit the help of the National Employment Service in subsequent job-seeking.

In summary, 45 trainees originally began in the pilot project; 30 were still employed somewhere within the garment industry at mid-January; 8 had left due to health or pregnancy conditions; and 7 could not be accounted for.

Cost of the Pilot Project

One hundred per cent of the value of production accrued to the firm, thereby reducing its share of the costs. The governments' costs were as follows:

Total Government Costs:	
Trainees' Wages	\$3,471.26
Instructors	3,410.00
Total	\$6,881.26

The total governmental share of wages amounted to \$77 per trainee. In addition the governments paid a total of \$76 per trainee to instructors. It was observed that graduates remained in the program an average of 6.2 weeks, while the average time for all trainees was 4.0 weeks.

As a direct consequence of the success of the pilot project the firm contracted with the Industrial Training Branch for a more comprehensive program to train a further 200 sewing machine operators.

Further Developments in the Garment Industry

Utilizing the experience gained in the pilot training project, ten-week on-the-job training programs were set up in nine different garment manufacturing concerns in Toronto. Trainees were recruited with the aid of the National Employment Service, the only requirement being that the candidate be unemployed and unskilled. The recruits, like the bulk of the labour force in the needle trades in Toronto, consisted almost entirely of female immigrants. Ninety of the original 119 recruits successfully completed a 10-week course and have since found steady employment.

In applying the original pilot project formula to the other garment industry projects, one basic change was made. It was decided that production returns would no longer accrue 100 per cent to the firm. Instead the new formula throughout the industry required the firms to bear the following cost:

Wages — Production

2

Thus the difference between wages and the value of the trainees' output is now borne equally by government and the employer.

URANIUM MINE PROJECT

One of the short-term training projects presently underway involves a uranium mining operation in Ontario.

During the late 1950's the mine employed about 1,600 workers. Late in 1959 the United States Government announced that it would not exercise its options on additional uranium; this had the effect of triggering the closure of several Ontario uranium mines. The mine in question adopted a policy of no layoffs during that period, in order to avoid the dislocation of its labour force and of the community as a whole. Instead the work force was reduced by means of normal attrition.

Since early in 1965, prospects for uranium sales have warranted rebuilding the labour force, but the local skill supply has not met the company's needs. Since there has been a general shortage of miners in Canada (recent statistics released by the Mining Association of Canada show that 1,033 jobs are vacant in the industry) the company has concluded that unskilled labour must be attracted and given intensive training if its work force is to be rebuilt within a reasonable period of time.

Request for Assistance

In August, 1965, the company asked the Industrial Training Branch to assist in initiating an on-the-job training program to supply its need for qualified stope miners. It also asked that when necessary the trainees receive educational upgrading to enable them to cope with the more sophisticated equipment they are required to use in the mines.

The firm wished to train 145 completely qualified stope miners in all related skills, including among others, drilling, blasting and slushing. The proposed number of trainees has made allowances for normal labour turnover and expected dropouts from the course.

Previous training experience in the company has indicated that it takes 12 weeks for an average trainee to acquire the skills necessary to reach minimum acceptable production levels. Therefore it has been decided that before he can leave the school the trainee should be familiar with all related skills and be able to drill 25 feet per hour. To be classed as a fully qualified miner he would be required to work without direct supervision on all phases of stope mining and be capable of drilling 35 feet per hour. He would be expected to reach this skill level only after working several months in the production area.

Qualification of Trainees

The firm has endeavoured to recruit trainees in Northern Ontario but has also found it necessary to bring them from greater distances. The qualifications required have automatically eliminated some applicants. They must be between the ages of 19 and 30 years. Since the physical demands of the job are high, the men are required to be sturdy with a weight of not less than 150 pounds. Eyesight standards must be 20/40 or better and must be capable of correction to 20/20 vision through the use of safety glasses. Obvious health defects such as hernia, heart murmurs, or other weaknesses automatically eliminate an applicant. In addition, the Workmen's Compensation Board demands chest X-rays for all underground workers.

Instructors

The firm has selected six bilingual instructors having the necessary background of experience and personal qualities. Each instructor has a minimum of five years' experience as a miner and has achieved the rating of "miner leader". In addition the instructors have been trained in first aid and safety during their employment at the mine before undertaking the training project, and some have had mine rescue training as well. In preparation for their new duties the six men have been given training in instructional techniques, job background, elementary geology, engineering and ventilation, and general familiarization with the functions of other departments including scheduling and budget control.

The Program

The short-term training program which began on November 15th, 1965, is in two phases, the first of which is administered by the Department of Education and the second by the Department of Labour. The company will provide all materials, equipment, and maintain training for a maximum of 145 employees. Also, the company is to provide sufficient work for the trainees so that there will be no break in their training.

Phase One

This part of the training involves academic upgrading and covers a period of between three and six weeks. The purpose of the training is to orient the unskilled applicant so that before going on the job he will have some understanding of the mining industry, the vocabulary used, and updated academic skills that will be required.

Phase Two

This part of the training is on the job. It should be completed within 52 weeks but will be extended if necessary. It is expected that individual employees

will remain in Phase Two for 14 to 18 weeks, with the training involving basic mining skills.

The number of trainees assigned to each instructor depends on the level of training being given. The instructor starts with two inexperienced trainees. After a few weeks, when the students require less constant attention, a third trainee is assigned. At various levels of training the maximum number of trainees per instructor is four. With three school stopes operating on a two-shift basis each, a maximum of 24 trainees can be accommodated on the job at the same time.

Cost of Training

Assuming an average of 3.5 trainees per instructor it costs \$486.17 for instructors' wages to train each man. To this will be added \$1,336.80, the wage cost of the trainee. A further direct cost would be that of supervision. There is one shift boss in charge of the training area on each shift, adding \$85.17 to the cost of training each miner, and making a total of \$2,008.14 per trainee. The cost of training 145 miners will be approximately \$291,180.

Because the goal of the program is to train fully qualified miners rather than miner assistants, training costs are higher than would otherwise be the case. These higher costs arise from an increase in

- (i) the required training time per trainee
- (ii) a higher anticipated dropout rate, and
- (iii) higher hourly rates of pay.

With these factors in mind, a cost-sharing formula has been devised that requires government to pay 12.5 per cent of trainee wage costs plus 50 per cent of the instructional costs.

The total provincial government share of the program works out to approximately \$44,000. The number of anticipated graduates, allowing for the high dropout rate in mines is expected to be 80 persons. Therefore, the province's cost of the program per graduate is estimated at \$550 plus technical assistance. The employer contributes all facilities, instruction and wages less \$550 per graduate.

EXTENT OF SHORT-TERM TRAINING

By the end of February, 1966, there were a total of 481 requests from various firms for short-term training programs. Three projects in the needle trades have been completed, while 64 programs are currently in progress. Most of the trainees are in the textile, garment, foundry, aircraft, mining, wood-working and appliance industries in Ontario.

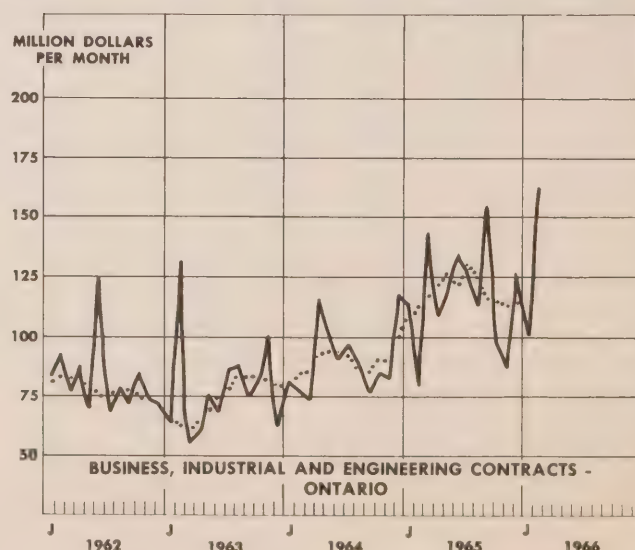
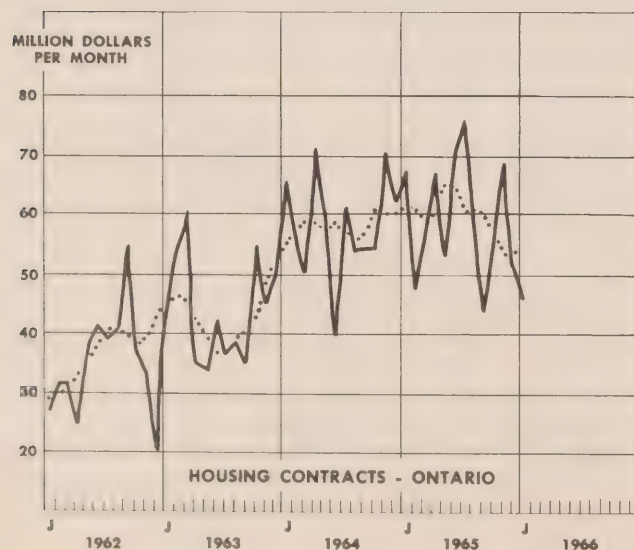
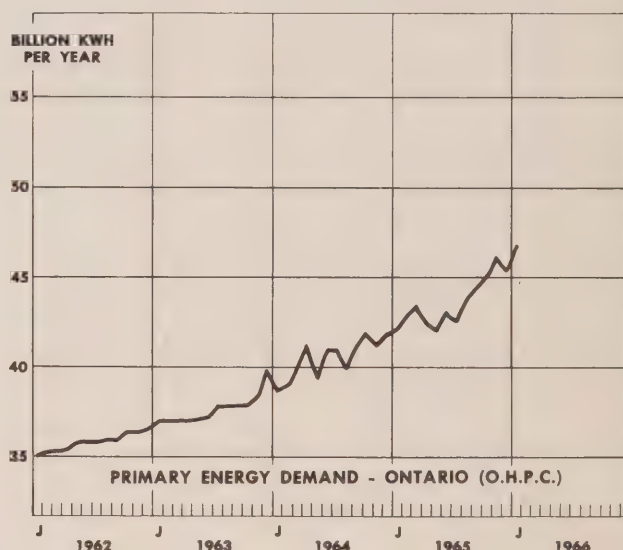
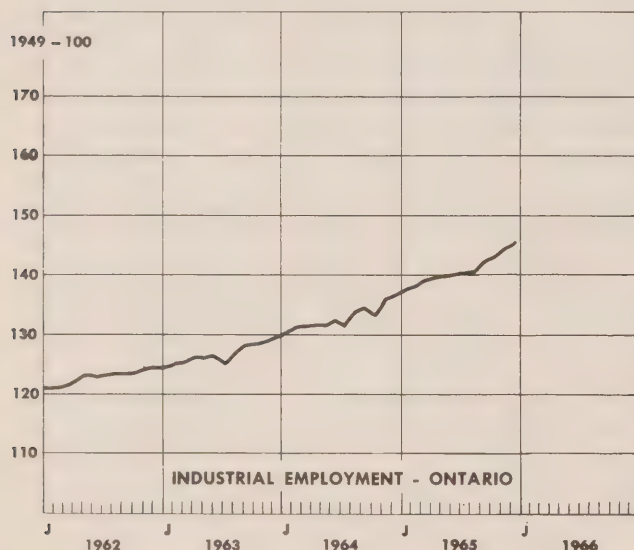
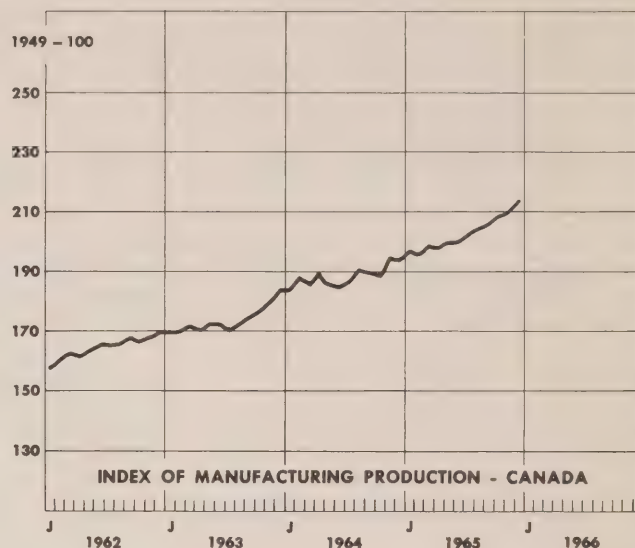
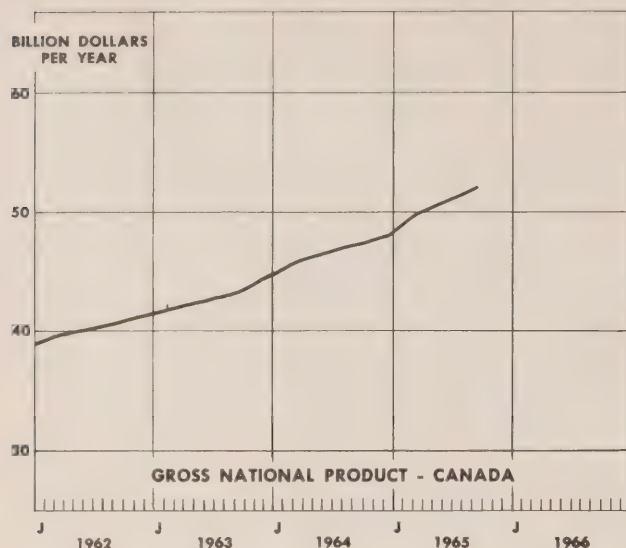
This suggests that short-term on-the-job training is not only accepted, but demanded by industry, and is being utilized in more and more skill areas.

ONTARIO ECONOMIC INDICATORS - SEASONALLY ADJUSTED
(* Figures for Canada)

LEADING INDICATORS														
	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Average Weekly Hours Worked in Manufacturing	41.1	41.0	40.3	41.7	41.5	41.0	41.3	40.8	40.9	40.7	41.1	41.4	41.4	
New Dwelling Unit Starts	5,138	4,107	5,815	5,353	3,848	5,010	5,806	4,770	7,377	4,464	3,764	4,708	4,634	5,805
Business Failures	78	90	77	130	67	87	65	63	83	79	70	71	69	72
Business Failures -Liabilities	2.1	3.4	10.3	8.9	4.0	5.3	4.6	4.0	20.7	9.5	2.6	3.4	3.2	4.9
New Orders in Manufacturing*	2,780	2,684	2,793	2,870	2,827	2,834	2,829	2,849	2,909	2,897	3,005	3,014	3,146	
Housing Contracts	62.5	67.9	48.1	57.9	67.3	53.7	70.9	76.2	59.1	44.3	56.6	68.9	51.9	46.4
Business, Industrial and Engineering Contracts	117.9	113.5	80.3	143.9	109.3	117.9	135.9	127.8	115.0	155.7	98.1	87.6	125.8	101.8
Money Supply*	17,645	17,855	18,065	18,289	18,557	18,683	18,716	19,172	19,639	19,654	19,786	19,747	19,770	19,760
T. S. E. Index - 77 Stocks	165.6	170.9	172.8	170.7	171.1	169.5	163.0	163.9	166.8	171.4	174.2	167.7	168.1	171.2
COINCIDENTAL AND LAGGING INDICATORS														
New Dwelling Unit Completions	3,236	3,667	3,727	8,392	7,115	4,518	4,019	2,153	4,075	3,269	2,830	3,825	4,570	5,553
Average Hourly Earnings in Manufacturing	2.15	2.19	2.20	2.23	2.23	2.22	2.23	2.23	2.23	2.26	2.28	2.29		
Gross National Product*	48,016			49,908			50,880			52,056				
Cheques Cashed in Clearing Centres	3,765	3,773	3,869	3,981	4,127	4,211	4,097	4,184	4,634	4,287	4,313	4,363	4,526	
Retail Trade	624	617	631	641	659	672	665	672	669	667	694	703	697	
Labour Force	2,566	2,614	2,592	2,590	2,594	2,607	2,626	2,626	2,642	2,608	2,605	2,621	2,641	2,675
Employed	2,491	2,542	2,524	2,531	2,522	2,536	2,548	2,556	2,574	2,541	2,556	2,562	2,582	2,612
Unemployed	75	72	68	59	72	71	78	72	68	67	49	59	59	63
Unemployed as % of Labour Force	2.9	2.8	2.6	2.3	2.8	2.7	3.0	2.7	2.6	2.6	1.9	2.3	2.2	2.4
Wages and Salaries	808	825	823	843	849	854	861	868	874	889	895	908	918	
Industrial Employment	136.8	137.9	138.2	139.3	139.8	140.1	140.5	140.7	140.9	142.5	143.3	144.8	145.7	
Total Industrial Production*	221.1	224.3	223.1	226.7	225.5	225.4	225.9	228.5	232.4	234.4	236.4	239.5	242.2	
Total Manufacturing	194.4	197.2	195.9	199.4	198.2	200.3	200.2	203.1	204.8	206.2	209.4	210.3	214.0	
Non-Durables	192.7	191.4	189.8	188.9	189.3	193.2	190.9	194.6	195.8	197.5	200.3	200.1	203.4	
Durables	196.4	203.9	203.1	211.8	208.6	208.5	211.1	213.1	215.4	216.2	220.0	222.3	226.5	
Mining	338.1	348.3	343.3	347.5	348.7	332.7	336.9	339.3	354.8	360.6	340.6	362.2	363.3	
Electric Power and Gas Utilities	434.1	429.6	437.4	441.8	435.8	431.8	433.5	431.6	449.8	454.5	480.6	483.5	471.3	
Primary Energy Demand (Annual Rate) BKNH	41.72	42.13	42.86	43.46	42.52	42.14	43.06	42.59	43.67	44.51	44.98	46.11	45.50	46.71
ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED*														
Domestic Exports	714.1	569.1	538.3	685.5	645.0	745.7	717.6	770.4	685.7	701.0	772.0	897.3	795.5	
Imports for Consumption	656.0	559.5	551.0	729.9	698.2	737.0	795.0	732.4	660.6	725.0	763.7	895.1	791.5	
Foreign Exchange Reserves	2,674	2,668	2,649	2,554	2,567	2,499	2,480	2,492	2,598	2,614	2,644	2,681	2,665	2,562
Prices, Industrial Materials	256.2	256.7	255.3	256.3	256.6	258.5	260.4	259.5	260.9	260.4	259.3	259.4	261.3	265.4

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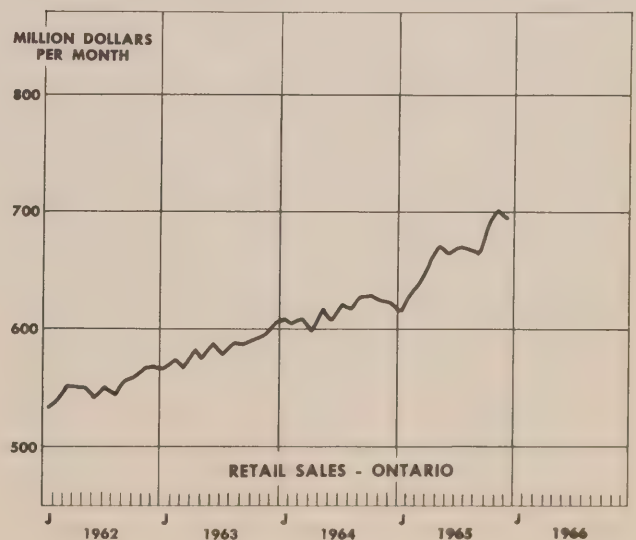
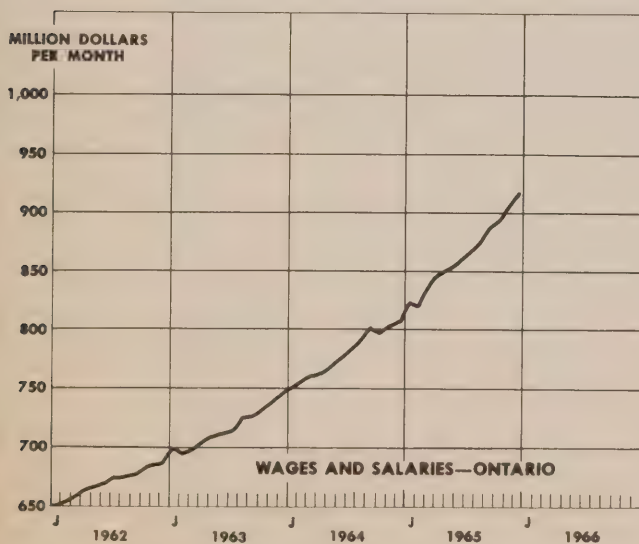
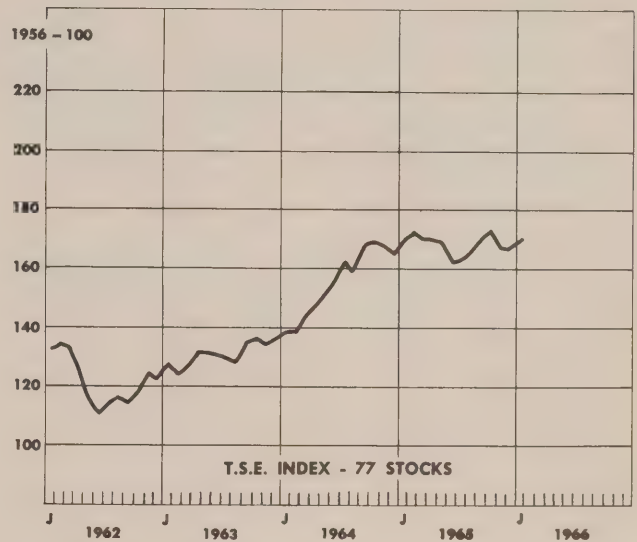
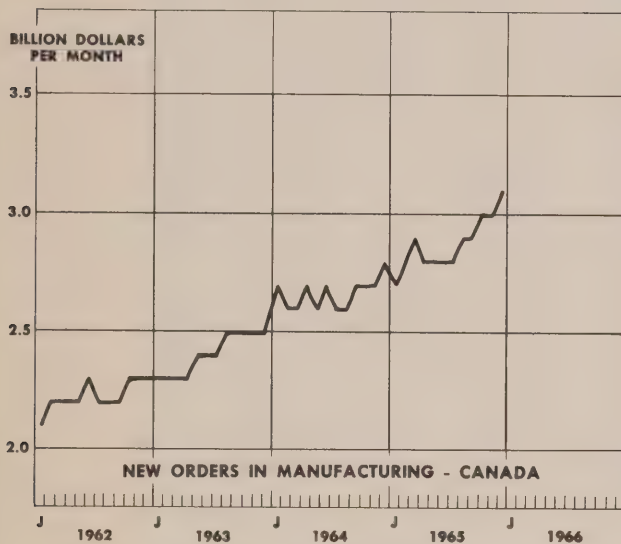
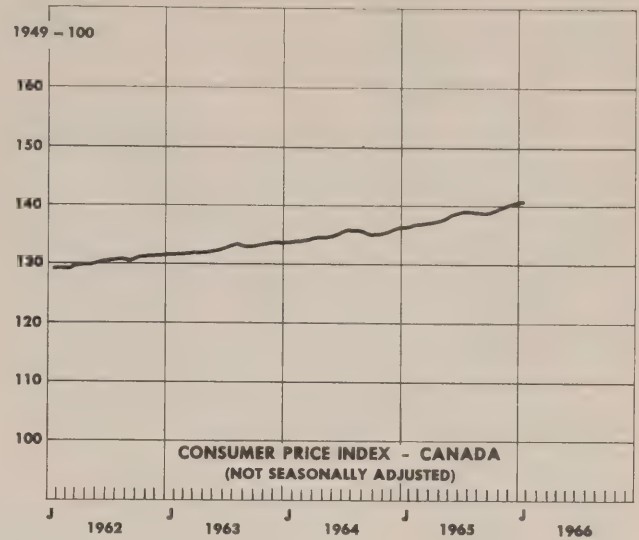
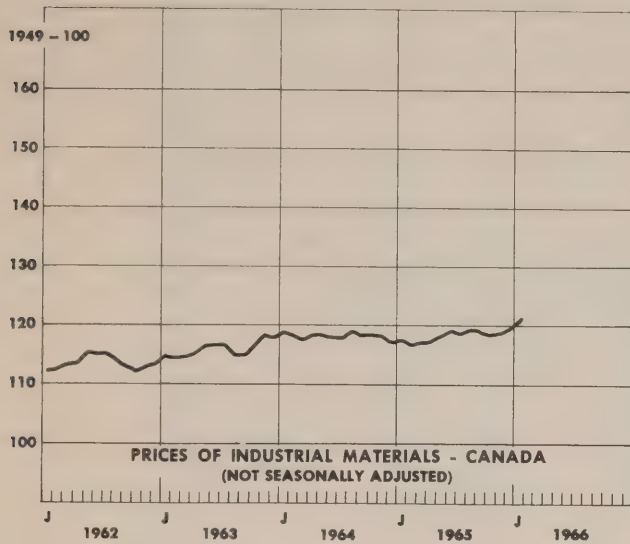
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



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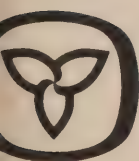
————— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



The Ontario Economic Review is prepared and edited monthly in the Economic Analysis Branch of the Department of Economics and Development and is available free of charge. The review is intended to provide current information on economic activity in Ontario and to act as a forum for the results of research in the public service on matters affecting the Ontario economy. The signed articles reflect the opinions of their authors and do not necessarily represent the views of the Economic Analysis Branch. All correspondence should be directed to the Editor, Ontario Economic Review, Economic Analysis Branch, Department of Economics and Development, 950 Yonge Street, Toronto 5.

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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

CONTENTS

The Ontario Economy	1
The Development of Ontario's Textile Industry, <i>Sidney Dolgoy</i>	3
Indicators and Charts	11

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THE ONTARIO ECONOMY

Employment

The Ontario labour force rose to 2,686 thousand in March, an increase of 3.7 per cent over March 1965. At the same time the number employed reached 2,629 thousand — 3.9 per cent more than twelve months earlier. The rate of unemployment — 2.1 per cent — was lower than at any time since 1953.

On a month-to-month basis the size of the Ontario labour force was up 14 thousand from the February level of 2,672 thousand; employment was up 17 thousand from a level of 2,612 thousand. The rate of unemployment in February had been 2.2 per cent — itself the lowest for that month since 1953.

A more detailed breakdown for February indicates that high levels of production were largely responsible for the low rate of unemployment. Some industries were seasonally slack and several industries were affected by the trucking strike, but there were relatively few lay-offs.

Many industries complained of serious shortages of skilled workers. As a result several firms were considering on-the-job training programs. Skilled workers were needed in ship building, heavy electrical machinery and household electrical appliances. There was also a demand for printers, die cutters, skilled machinists, sheet metal workers and auto and diesel mechanics. The garment and leather industries reported shortages for sewing machine operators and stitchers.

Continuing high production was reported in most of the manufacturing industries, with the iron and steel, chemical, rubber, leather, paper, and textiles industries operating at full production. The planned expansion of the Chrysler Corporation's Windsor plant promised to create 1,500 jobs.

Activity in fishing, canning, dairy products and carbonated beverages was slow, with wholesale and retail trade seasonally slack too. The construction industry was slowed both by bad weather conditions and the trucking strike. Shortages of production materials, caused by the strike, led to

temporary lay-offs in industries such as hardware and tool products, heating and electrical apparatus, and motor vehicle parts.

Consumer Prices

The Consumer Price Index for Canada rose 0.2 per cent to a level of 142.4 in March (based on 1949 = 100). Increases of 0.7 per cent in the clothing component and 0.6 per cent in the food component were the major factors. Widespread price increases in wearing apparel, and laundry, dry cleaning and shoe repair services put the clothing index up to 124.2, while increases in the prices of bread, eggs, most cuts of meat and certain fruits and vegetables — outweighing declines in sirloin and round steak, chicken, fresh tomatoes, bananas, oranges and instant coffee — brought the food index up to 143.4.

Comparing the March figures for 1965 and 1966, there has been an increase of 3.7 per cent in all items of the Index. By far the most important factor has been the 7.6 per cent increase in food, an increase general throughout all of Canada and the United States. Clothing and transportation increases of 3.2 per cent 3.0 per cent ranked second and third. Health and personal care was next at 2.7 per cent, followed by housing (2.2 per cent), recreation and reading (2.1 per cent) and tobacco and alcohol (1.2 per cent).

Bank of Canada Annual Report

The Canadian economy experienced a sharp rise in aggregate demand and employment in 1965 which could lead to "overloading" the economy if productivity performance is not improved.

Louis Rasminsky, Governor of the Bank of Canada, stated in his annual report to the Minister of Finance that the increase in demand was a major factor influencing the monetary policy of the Bank. Its policy was geared to ensuring that excessive demand would not lead to inflationary pressures. On the other hand, the report stated, the failure of the

Atlantic Acceptance Company had exerted pressure in the opposite direction, making it necessary for the Bank to take action to ensure sufficient liquidity for the maintenance of confidence in the financial system.

Another factor which influenced monetary policy was the United States guidelines policy, designed to eliminate the deficit in its international balance of payments. The initial impact was to encourage repatriation of U.S. short-term financial assets held in Canada by United States corporations. However, this was offset by the inflow into Canada of banking funds from overseas.

The Bank believes that productivity could have been better in 1965. It therefore emphasized the need for policies designed to strengthen the "supply side" of the economy. In particular, productivity could be improved by putting into use the resources of high-unemployment areas.

It further stated that Canada must endeavour to increase its ability to compete effectively with foreign producers and thus reduce dependence on net capital inflows. Although Canada needs to import a great deal of capital to maintain high levels of consumption and investment, it has no "inherent right" to import capital; for there are conflicting claims on the resources of capital-exporting countries. Canada should thus aim to reduce this dependence by fully utilizing its own resources. This would involve maximizing productivity and industrial efficiency including educating the rapidly expanding labour force.

In 1965 the sources of growth were an increase in the labour force and an improvement in productivity due to high investment in plant and equipment. Unemployment was reduced to 3.5 per cent — the lowest since 1956; in fact, there were shortages of skilled and professional labour. While costs and prices were up, there was still an increase of 6.5 per cent in real output.

The major problem for the economy was the need to maintain the existing high level of demand, while being alert simultaneously to the dangers of excessive demand. Excessive demand could conceivably outrun the productive capacity and lead to over-loading the economy. During 1965, as the economy moved towards full utilization of resources, the heavy demand for funds was reflected in the Bank's policy with regard to credit conditions. The yield on Government bonds rose from 5.0 to 5.4 per cent.

The assets of the chartered banks rose by 12 per cent in 1965 compared to an increase of 5.25 per cent in 1964. Consumer credit outstanding increased

by about 15 per cent. Capital inflows into Canada rose from almost \$800 million to about \$1,300 million. In December, the Bank Rate of 4.25 per cent was raised by 0.5 per cent to offset an increase of 0.5 per cent in rediscount rates in the United States.

For the second successive year the rate of growth of the economy exceeded that of the United States. This high rate of growth was reflected in increased farm output, an 11 per cent increase in labour income, a 10 per cent rise in corporate profits, and a more-than-7.5 per cent increase in consumer expenditure.

In international trade Canada experienced a large increase in imports — they grew more rapidly than domestic output. Non-wheat exports, on the other hand, rose only moderately, mainly because of slackened economic growth in some of Canada's major overseas markets.

Federal Budget — 1966-67

In his first budget, presented to Parliament on March 29th, 1966, Finance Minister Mitchell Sharp introduced measures aimed at containing the rate of economic expansion in the Canadian economy so as not to strain existing resources. To slacken the rate of growth of demand, several tax changes were introduced to moderate expenditures by both consumers and the business community.

The 10 per cent tax reduction of the last fiscal year was removed and replaced by a 20 per cent reduction — limited to a ceiling of \$20 — applicable to low income earners. However, for six out of 10 taxpayers — that is, those earning average or above average incomes — taxes were to increase as of June 1st.

A married man with two dependents would have to earn \$4,000 or less to benefit from the tax reduction.

A new measure to ease business spending and create forced saving was a special temporary tax on corporate profits in excess of \$30,000. Starting in May, corporations with an earning base over this amount will have to pay five per cent into a special fund in monthly payments. The money would be held in a special account by the Government of Canada and would be refunded — with five per cent interest — in 18 to 36 months, depending on economic conditions during that time.

Federal Government sources expected that about 100,000 out of 116,000 firms would not be affected because of the minimum earning base of \$30,000. In the first year of collections the fund would acquire \$250 million, building up to \$375 million in the whole 18 month period.

Another inducement to delay expenditure was the announcement that the present 11 per cent sales tax on production machinery and equipment (but not on building materials) would be reduced to six per cent on April 1st, 1967 and would be eliminated entirely one year later. There was also to be an immediate elimination of the 11 per cent sales tax on certain limited types of production machinery and equipment.

Changes in capital cost allowances were made to further achieve a moderation in business reinvestment.

The Minister of Finance also asserted that to help achieve these objectives, Federal departments would postpone 10 per cent of their planned construction in the 1966-67 fiscal year.

Based on estimated revenues of \$8,300 million and expenditures of \$8,450 million, the budgetary deficit for the fiscal year 1966-67 was expected to be a relatively small \$150 million. In the fiscal year 1965-66 it was an even smaller \$34 million, based on revenues of \$7,673 million and expenditures of \$7,707 million.

THE DEVELOPMENT OF ONTARIO'S TEXTILE INDUSTRY

SIDNEY DOLGOY

Economist, Economic Analysis Branch

ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Important and interesting: these are two adjectives that fittingly describe Ontario's textile industry.

To describe the industry as the driving force in the provincial economy would be wrong. There are other industries which contribute more to the economy, others which are larger and produce a greater dollar value of goods. Yet the textile industry is important in that it provides employment for large numbers of individuals, and in some cases is the mainstay of smaller urban centres.

It is interesting because of its varied history, having experienced years of disappointment and years of success; interesting, too, because it has faced — and still faces — the stiff competition of imported textiles, which are among the more significant of Canada's imports.

The following is an attempt to trace the development of textile manufacturing in Ontario, pointing out some of the problems confronting the industry both in the past and in the present.

There are basically three major components making up the industry as it is pictured here: the users of wool, cotton and man-made fibres. All three help to meet the textile requirements of Canadians — among the largest *per capita* consumers of textiles in

the world. The yarn, fabric and cloth which they produce go on to become the basic materials for the manufacture of clothing, knitted goods, carpets, industrial goods and a wide variety of other products.

Textile mills in Ontario — second only to Quebec in total textile output and employment in Canada — have been important employers of both skilled and unskilled labour for well over a century. This has been particularly so among the smaller communities along the St. Lawrence River and in the Ottawa and Grand River Valleys where the industry has tended to locate. Often these mills, serving as the principal source of employment, have been the focal points around which small urban centres have evolved. In 1871 over 4,500 employees (or about five per cent of the manufacturing labour force then in Ontario) worked in Ontario woollen and cotton textile mills. By 1965 there were approximately 22,300 workers⁽¹⁾ in the province producing wool, cotton and man-made textiles — just under four per cent of Ontario's manufacturing labour force.

Yet the industry — both in Ontario and Canada — has not always enjoyed good fortune throughout the past century. Periods of rapid growth have given way to periods of stagnation. Only recently did textile producers come out of a serious slump during which recovery was thought to be all but impossible. The reasons behind its declining fortunes have varied: at the end of the American Civil War it was

⁽¹⁾ Estimated by the Canadian Textiles Institute. Figure excludes knitting mills.

because of the loss of United States markets; in the 1950's it was because of the failure to remain competitive with imported textiles. In the latter case, admittedly, the task was a difficult one. Producers in the United States were highly mechanized and efficient. In addition they enjoyed the benefit of a large domestic market, enabling them to have longer production runs and greater economies of scale. Asian producers had the advantage of very low wages, particularly in the case of relatively labour-intensive woollens and cottons.

Another aspect of the development of Ontario textiles is the fact that, while other manufacturing industries have been expanding and growing relatively more significant in the province, this industry has declined in relative importance. In 1870, wool cloth making — the most important sector of the textile industry at the time — was the seventh largest manufacturing group in Ontario, with a total product value of over \$4.5 million; in 1961 the most important textile producers — synthetic textile mills — ranked a distant twenty-ninth, with factory shipments valued at \$111.1 million. This does not necessarily reflect inherent weakness in the Ontario textile industry as compared with textiles elsewhere. Instead it is a long-run trend, characteristic of industries manufacturing the basic necessities of life in expanding industrialized economies. Expansion in these industries is more closely related to population expansion than to income growth. Consequently, growth industries — those on which a rising proportion of income is spent as income rises — have supplanted the textile industry in importance. The automotive industry, for instance, is a consumer durables industry which has grown phenomenally in recent decades.

The economic growth in Ontario leading to the relative decline of textiles has had yet another important effect. Along with industrialization and growing productivity have come higher wages. Textile producers, faced with pressures for higher wages and the need to maintain an adequate labour supply, have found it necessary to raise wages correspondingly, keeping them only a certain distance below the industrial average.⁽²⁾ However, because labour costs play so important a role in the industry's cost structure, different measures have been taken to keep them as low as possible. Producers have tended to remain in rural and small urban areas where wages are generally lower; and they have employed a relatively large percentage of women. To a certain extent this search for minimum labour costs has made Quebec, with its cheaper labour, a more attractive location for textile producers.⁽³⁾ Iron-

ically, therefore, the flourishing industrial complex of Ontario has in some respects worked against the interests of the textile industry.

Increasing mechanization in textiles is one factor which has partially balanced the restrictive effects of higher wages. While the production of natural-fibre textiles has always been relatively labour intensive, it has become less so over the decades, as producers have made more use of better quality machinery. Given any existing tariff structure, this has been one of the principal ways in which they have been able to compete more effectively with low-priced imported textiles. Synthetic textile production, inherently more capital intensive, has seen a smaller degree of change; yet it too has adopted new methods and better capital equipment. As a result Ontario productivity in textiles has generally kept pace with other countries over the long run.

Synthetic textile producers have also benefited from the extended application of man-made fibres. The creation of new demands for synthetics, particularly for industrial uses, has permitted the industry to grow in spite of the limitations of a relatively small national population. Some of the applications will be touched upon later in tracing the evolution of Ontario's man-made textiles.

DEVELOPMENTS OVER THE PAST CENTURY

Woollen Textiles

Textile production in Ontario actually goes as far back as the days of early settlement in Upper Canada, when coarse wool cloth was made by the pioneer women. Although the finer-quality wool products were imported from the United Kingdom, there was still a need for coarser and more-economical woollen clothing for everyday use. Wool, particularly suitable for the harsh Canadian winters because of its warmth, lightness and resilience, was produced on the family spinning wheel and loom. The women of the household carried out all the steps still followed today: the fleece was washed, oiled, carded, combed, and then spun into yarn; the yarn was then woven, fulled and tented, producing an unfinished fabric. When dyed and sheared this became the finished cloth. This domestic production served the relatively limited needs of each family at that time. In 1842 over 433,000 yards of home-made cloth and 727,000 yards of home-made

⁽²⁾ In 1965 Ontario "average hourly earnings" for manufacturing industries as a whole were \$2.24; for textile producers they were \$1.74.

⁽³⁾ The comparable Quebec figures for "average hourly earnings" in 1965 were \$1.89 and \$1.58 for overall manufacturing and textile industries respectively.

flannel (soft woollen cloth of loose texture) were produced in Upper Canada.

Throughout the 19th century, as settlement advanced and a more sophisticated economy evolved, organized wool cloth production spread to meet the expanding needs for wool clothing. Custom carding and fulling mills were set up along watersheds, where they had ready sources of both power and water. In most cases they operated in connection with grist mills or sawmills. The sites chosen were also within a reasonable distance of sheep-grazing areas, even though as time went on more and more raw wool — especially of finer grades — was imported from countries such as Australia and New Zealand.⁽⁴⁾

The first mill using power looms was set up in 1820 near Georgetown, Upper Canada (it was later moved to Streetsville). Although Lower Canada and the Maritimes also engaged in wool cloth production, Upper Canada became the major producer during this period. Census records show that in 1848 total production in Upper Canada was 625,000 yards of fulled cloth and 1,300,000 yards of flannel.

With the decline of hand-made cloth came the growth of the factory system, particularly around the middle of the century. Knitting mills were opened, first at Galt in 1854, then at Ancaster in 1859, at Paris in 1870, and at Cobourg and Carleton Place.⁽⁵⁾ Gradually, custom mills gave way to larger mills which made better use of the division of labour through the application of their advanced equipment and techniques. At the same time a wider and wider range of better-quality goods was produced.

In general the influences affecting woollen textile production were from that time onward the same as those affecting cottons. As such the development of these two branches of the textile industry has been somewhat parallel. Nevertheless, the growth of cotton textiles was to some extent at the expense of woollens. Cotton provided a cheap yet adequate substitute for coarse Canadian woollens, so that by the end of the century Canadian production of cottons exceeded that of woollens. Furthermore, the remaining demand for woollens tended to shift more and more to fine-grade, higher-quality woollens which Canadians were unable to produce. Consequently employment in Ontario woollen mills, as a percentage of total Ontario textile employment, fell from about 90 per cent in 1871 to slightly over 60 per cent in 1901. Wool cloth producers dropped from the seventh most important industrial group in Ontario (in value of product) to fifteenth. Over the years Ontario has remained the leading wool

textile producer in Canada, although its lead has been reduced as Quebec's textile production has expanded.

Cotton Textiles

As in the case of woollens, the appropriate site for the large-scale manufacture of cotton textiles was at the source of power, water and raw materials (proximity to markets was also desirable if not essential). In Canada the regions bordering the St. Lawrence River and Lake Ontario best filled these requirements. The area around Montreal was especially suitable, with the basic raw cotton — imported from the Southern United States — coming directly in by water route. (In part this explains why so great a portion of the Canadian cotton textiles group has located in this area of Quebec.) However, cotton textile plants have also located in Ontario, especially in the Toronto and Hamilton areas.

The production of cotton in Upper Canada first began in 1847 when a mill with about 20 looms was set up at Thorold. Using cotton imported from the Southern United States, it undertook to produce grey sheetings and cotton batting. In 1860 a larger-scale mill with 12,000 spindles and 260 looms went into operation at Merriton, and one year later another was opened at Dundas.

The American Civil War proved to be a great boon to both cotton and wool manufacturers in Upper and Lower Canada. The conflict across the border produced so severe a paralysis in cotton manufacturing in the Northern States that it was thought American producers would never be able to regain their once powerful position. Canadian producers, facing an expanding market with limited competition, greatly increased their capacity over the period from 1860 to 1865. Thus cotton and wool cloth production rose dramatically, and large amounts of capital were poured into the industry.

As it turned out, the expectation that the United States would not recover from the economic dislocation of the war proved to be unfounded. The large American markets upon which the Canadian producers had depended shrank as American textile producers regained their lost vigour; prices fell, and the growth of Canadian textile production was halted. So severe was the impact of American industrial recovery that new high tariffs were imposed to

⁽⁴⁾ Canadian wool was not always usable, both because it was limited to coarser grades and because it contained a sprinkling of black fibres. The latter factor prevented its use for light-coloured materials.

⁽⁵⁾ Yet while production became more mechanized, the distribution system still followed the lines of a barter economy. Salesmen visited farms, trading cloth for wool, grain or other farm produce — seldom did money actually enter into the transaction.

safeguard the development of Canadian manufactures.⁽⁶⁾ In 1879 the duties on cotton goods were increased from 17.5 per cent to a range of 20 per cent to 30 per cent. Even these measures, however, were for a time incapable of rectifying the problem which had arisen. Having anticipated a much larger demand for cottons, most Canadian manufacturers had invested in mills producing goods of the same class. Consequently expansion ceased for over a decade, and even by 1882 Canadian mills were capable of supplying enough of the common class of cottons to meet the needs of a population twice that of Canada. Only by 1890, after some manufacturers had either abandoned their property or imported new machinery to diversify their products, were Canadian mills capable of producing a wide range of goods.

This development, in turn, had the effect of creating many separate production units, each attempting to produce every kind of fabric. To permit specialization and avoid inefficiency due to constant loom and machinery changes, a number of firms in the industry amalgamated. This first step in 1892 was soon followed by others in 1902, 1905 and 1910, as the activities of more and more mills were consolidated. The result was increased efficiency, better wages and lower prices.

The steady advances of cotton textile manufacturers continued until the outbreak of World War I, when a period of inactivity set in among Canada's 26 cotton mills. Toward the end of the war, however, extensive war orders together with the elimination of overseas competition led to record volumes of production and employment. By 1920, Canadian production was valued at \$92.5 million, and employment numbered 17,625. Rated capacity was 21,754 looms and 1,057,000 spindles. In general, the growth of cotton textiles during the 1920's was impressive. However the depression years of the 1930's brought a sharp decline, one which persisted until the stimulus of war orders was felt in the early 1940's. At the same time, the introduction of synthetic textile production in Ontario brought about a slight relative decline in the popularity of cotton, somewhat in the same manner as cottons had affected woollen textiles earlier. Henceforward the role of cotton in Ontario's textile industry was to decline.

The introduction of synthetic textile production in Ontario led to an essential change in the nature of the textile production. The basically labour-intensive cotton and woollen textile industries increas-

ingly gave way to the more capital-intensive synthetics production until synthetics became the most important part of Ontario's textile industry.

Man-Made Textiles

Synthetic textile production, unlike that of wool and cotton, is relatively new to Canada, having been established only in 1925. Since man-made fibres possess many of the qualities of natural fibres in addition to several superior characteristics — and low cost — the demand has grown over the past few decades until it has begun to approach cotton textiles in popularity. The fact that most of the raw materials come from such abundant resources as wood, coal, natural gas, and water — all available in Canada — has given synthetic textile producers relatively stable prices. Cottons and woollens, on the other hand, have been largely dependent upon imported raw materials, and consequently have been subject to external price influences.

Rayon

The Canadian production of viscose rayon (or "artificial silk") first began in 1925 at Cornwall, on the St. Lawrence River. A plant was set up to convert chemically the cellulose of spruce wood pulp and cotton linters into a liquid viscose solution which was then pumped through spinnerets and chemically solidified. The location afforded easy access to the raw materials and chemicals, which were almost exclusively Canadian in origin. The plant was also conveniently close to markets where its products — viscose textile yarn, staple fibre and tire yarn — would be consumed. A variant, acetate rayon — made by combining acetic acid with cellulose and then dissolving it with acetone — was first produced in Quebec.

Nylon

Ontario was the first Canadian province to introduce the partial production of nylon. A plant at Kingston, opened in 1942, produced nylon filament yarn by entirely chemical processes. Most of the plant's production at first went to the war effort for use in parachutes and shock cords for nylon tows, and, by the end of the war, the plant was producing 100,000 pounds of nylon monthly.

The complete production of nylon, involving a series of complicated chemical processes, was not all carried out in Canada initially. Basically, the production of nylon involves the combination of nitrogen and oxygen from the air, hydrogen from water and benzene from coal tar (benzene can be replaced with a petrochemical). The first step in their chemical interaction is the formation of nylon salt, followed by its conversion into solid nylon

⁽⁶⁾ Admittedly, other factors were important — such as nationalism and the need for revenue to finance the trans-continental railway.

flake. The flake is then melted and pumped through a spinneret to form filaments, which are then twisted together to form a yarn. Originally, nylon flake was imported; but by 1947 the Kingston plant possessed the facilities to undertake the production of the flake from imported nylon salt. By 1951 the plant was able to manufacture the salt from imported intermediates or basic chemicals – hexamethylene diamine and adipic acid. The entirely Canadian production of nylon commenced in 1953, when a plant producing the main intermediates was built at Maitland, Ontario.

Thus by 1953 the production of synthetic textiles in Ontario was firmly established: the proximity to the sources of water, power and the petrochemical raw materials made this region of Ontario the ideal location in Canada for such an industrial operation. In addition the markets and clothing industries of Toronto and Montreal were nearby.

The Kingston plant has not restricted its production solely to the needs of the clothing industries. Included among its manufactures are nylon continuous-filament yarns, tire yarn, staple fibre and Tynex nylon monofilament – all of which are sold to manufacturers of hosiery, apparel and industrial textiles, tires, brushes, sporting goods and plastics.

Terylene

Another synthetic textile produced in Ontario is Terylene, known as Dacron in the United States. This fibre, like other synthetic fibres, is manufactured in two distinct forms – the silky filament yarn and the wool-like staple fibre. Its applications include clothing, draperies, fire-fighting hose, paper-maker's felt, ropes, filter fabrics, fish nets, industrial belts, and feather replacement in pillows.

In 1955 a plant at Millhaven, Ontario, began production of Terylene polyester fibre with the intention of eventually satisfying all Canadian requirements for this textile fibre. Terylene, like nylon, involves the application of certain petrochemical ingredients and requires a sufficient water and power supply; thus the region along Lake Ontario provided an appropriate plant site.

Tariffs on Synthetics

Synthetic textiles have enjoyed relatively greater tariff protection than either cotton or wool. In 1930, when synthetic textile production was just developing, and when tariff rates generally were at a peak, the British Preferential and Most-Favoured Nation tariffs on the import of synthetics were 30 per cent and 80 per cent respectively. Imported cotton goods faced duties of 22.5 per cent and 33 per cent, while duties on woollen goods were 50 per cent and 60 per cent. By 1948, after GATT negotiations had led

to a revision of tariff rates, duties on synthetics were 20 per cent and 30 per cent, woollens (fabric) 15 per cent and 27 per cent, and cottons 17.5 per cent and 20 per cent. This high level of protection was particularly helpful in establishing synthetic textile production in Canada.

Long-Run Growth of Employment

The histories of the three textiles discussed – wool, cotton and synthetics – show that development has not been smooth, but like that of so many other products has tended to follow a cyclical pattern. Yet over the long run these industries have remained firmly established in Ontario. Employment has increased substantially: in 1871 less than 5,000 people were involved in textile production in Ontario; the number increased to over 13,000 by 1930, and to over 22,000 by 1965. It is true, however, that employment in the once dominant Ontario woollen textiles sector has not shown much progress, with only 4,700 employees reported in 1965. This is understandable when certain factors – such as mechanization, the small, poor-to-medium quality of the domestic wool crop, and the displacement of woollens by cottons and synthetics – are taken into consideration. Employment in cotton textile production, on the other hand, has shown great progress since the 19th century, growing from just a few hundred to 4,600 employees in 1965. Synthetic textiles today are a very important source of employment too: in 1965 about 7,400 employees worked on the production of man-made textiles in Ontario.⁽⁷⁾

RECENT DEVELOPMENTS

The outbreak of World War II – creating a great demand for clothing and other products – had a stimulating effect on domestic producers⁽⁸⁾ of textiles. Military requirements provided a fillip which saw total Canadian textile production jump from 174.3 million pounds in 1938 to 311.9 million pounds in 1942. The greatest increase – 87.2 per cent – was recorded in synthetic textiles, which rose from some 16.4 million to 30.7 million pounds. During the same period, cotton textile production rose 79.9 per cent from 119.6 million to 215.2 million pounds; and woollens climbed 81.8 per cent from 36.2 million to 65.8 million pounds. This great increase in demand, after the lean days of the 1930's, was met for the most part by putting all existing equipment into full-

⁽⁷⁾ 1965 employment figures provided by Canadian Textiles Institute. Statistics also show that other textile producers and knitting mills provided employment for 5,600 and 9,500 respectively in 1965.

time use and by running shifts around the clock. Immediately following this massive effort, however, the falling off of military requirements resulted in a sharp decline. By 1944 total textile production dropped to 254.5 million pounds – a decline of almost 20 per cent from the 1942 figure.

Fortunately, the industry was buoyed by the post-war demand for textiles, both at home and abroad. War-ravaged countries, normally competitive with Canadian producers, were unable to meet even their own domestic requirements. The devaluation of the Canadian dollar in 1949 also helped textile producers and by 1950 total annual production was up to a record high of 339.7 million pounds.

Problems of the 1950's

Immediately following the relatively good production years of 1950 and 1951, important factors which were to work against Canadian textiles began to exert their influence.

One of the major factors was the development of textile industries in other countries. Many of those which had been damaged in the war were rebuilt and had the latest equipment. From a competitive point of view Canada now faced the textile industries of Japan, India, and other Asian countries, as well as those of the United States and United Kingdom. In its competition with United States producers, the Canadian textile industry suffered from lower productivity – the result of both shorter production runs and generally less-efficient equipment.⁽⁹⁾ Against Asian producers it faced the problem of competing in labour-intensive commodities with low-wage countries.⁽¹⁰⁾

The granting of Most-Favoured-Nation status to Japan in 1954 reduced the tariff on imports from Japan and made it even more competitive in the Canadian market. Similarly, an overvalued Canadian dollar also worked against the Canadian textile producers by giving imported textiles an added price advantage in Canada.

No less important was a change in demand which worked against domestic textile plants. As the post-war years brought prosperity, the demand for more diversified products increased. No longer were people content with limited style changes; instead they insisted on a wide range of products from which to choose. The Canadian textile industry, already suffering from the disadvantages of a small market, was thus being forced to give up whatever limited economies of scale it possessed through single lines and longer production runs. Now product diversification gave an even greater com-

petitive advantage to countries like the United States, which had larger domestic markets.

The combined effect of all these factors resulted in a major set-back for the Canadian industry. The following table reveals the extent to which the volume of production was affected.

CANADIAN INDEX OF INDUSTRIAL PRODUCTION IN TEXTILE PRODUCTS (EXCLUDING CLOTHING)

Year	Index 1949 = 100	Annual % Change
1951	113.1	
1952	102.9	— 9.0
1953	107.9	4.9
1954	94.3	—12.6
1955	114.0	20.9
1956	117.3	2.9
1957	117.6	0.3
1958	109.9	— 6.5
1959	124.4	13.2
1960	122.5	— 1.5

Source: DBS, *Index of Industrial Production*.

Although 1954 was the worse year, the succeeding years did not appreciably improve the position of the industry.

The cyclical movement of overall textile production was also characteristic of specific textiles. All three textiles – cotton, wool and synthetic – declined or improved more or less at the same time. Yet most of the growth of production was accounted for by synthetic textiles. In 1956 the volume of synthetic textile production was 50 per cent higher than it had been in 1949, while cottons were roughly par with 1949, and woollens were about eight per cent below their 1949 volume.

The impact of import competition – one of the major problems of the industry – is reflected in the percentage of the Canadian market served by Canadian producers. Measuring textile fabric in square yardage, this refers to:

Canadian shipments – exports

Canadian shipments – exports + imports

⁽⁹⁾ Since both the Ontario and overall Canadian textile industries have followed a similar path, references from this point onward will be to the overall Canadian industry unless otherwise stated.

⁽¹⁰⁾ The United States was the acknowledged leader in the efficiency of textile production. In Canada, no really concerted effort to modernize production had been made since the 1920's. Instead the growth of demand had been met in the past by more intensive use of existing equipment. In most cases new equipment was substituted for old only when replacement was essential.

⁽¹¹⁾ While labour productivity in these countries admittedly was lower, the very low level of wages more than offset this.

Below are the percentages and some of the statistics for the depressed year of 1954.

TEXTILE FABRIC IN CANADA: 1954
(Thousands of Square Yards)

Fabric	Canadian Shipments	Imports	Exports	Apparent Market	% Canadian
Woollen	26,232	17,985	—	44,217	59.3
Cotton	282,918	137,122	3,371	416,669	67.1
Man-Made	115,420	37,557	1,886	151,091	75.1
Total of Above	424,570	192,664	5,257	611,977	68.5

Source: Canadian Textile Journal Publishing Co. Ltd., 1964 *Manual of the Textile Industry of Canada*.

Over 90 per cent of the imported woollen fabric came from the United Kingdom in 1954. The United States, on the other hand, was the major source of imported cottons and synthetics, accounting for 75 per cent and 90 per cent of total imports respectively.

That the period of the 1950's was a devastating one for domestic textile producers is obvious from the fact that, in Ontario alone, 45 mills were forced to close and 7,500 employment opportunities were lost.⁽¹¹⁾ Throughout the industry profits as a percentage of sales declined considerably.

Alleviation of the serious problems finally began in the early 1960's, following the difficult recession years 1958 and 1960. The change was brought about in part by the industry and in part by external factors.

The Current Revival

The important measures taken by the industry had one objective: to rationalize production and thereby make Canadian producers more competitive. This was made somewhat easier because of the reduced number of firms in the industry — production was now concentrated in fewer but larger mills. To improve their competitive position further, firms undertook vertical integration, extending their production to the manufacture of clothing and other finished products. New capital investment, somewhat erratic during the previous decade, now increased steadily in the first five years of the 1960's. Canadian textile plants increased investment from \$27.5 million in 1961 to \$108.2 million in 1965. In Ontario alone new capital investment rose from \$7.1 million to \$66.3 million during the same period. Investment in machinery and equipment accounted for close to 80 per cent of the total in each case, with construction accounting for about 20 per cent.

Yet the benefit of these measures might not have been realized had it not been for favourable external factors. The most important was the devaluation of the Canadian dollar, making Canadian textiles more competitive both at home and in foreign markets. Temporary import surcharges in 1962 further improved the position of domestic producers. Another factor was the voluntary action of the Japanese in imposing quotas on their textile sales to Canada. Expanded demand in the United States contributed by taking up the bulk of American production; this left little production overflow to compete in the Canadian market.

The events of the early 1960's have resulted in a major revival of the textile industry in Canada. At the end of 1965, Canadian employment in the three major groups was 50,000,⁽¹²⁾ an increase of 7,200 over 1954. Wool yarn and cloth accounted for 8,727, cotton yarn and cloth 18,687, and man-made textiles (including a small number of silk workers) 22,574.

The extent of the revival is visible in the following table:

CANADIAN FABRIC MARKET: WOOL, COTTON AND MAN-MADE
(Millions of Square Yards)

Year	Canadian Production	Imports	Exports	Apparent Market	% Canadian
1958	447	296	6	737	60
1959	457	312	8	761	59
1960	440	321	22	739	57
1961	474	341	37	778	56
1962	481	329	25	785	58
1963	523	320	31	812	61
1964 ⁽¹¹⁾	546	368	45	869	58
1965 ⁽¹¹⁾	596	349	55	890	61

⁽¹¹⁾ Figures provided by Canadian Textiles Institute.

Source: Canadian Textile Journal Publishing Co. Ltd., 1965 *Manual of the Textile Industry of Canada*.

Although the industry now holds a smaller percentage of the market than it had held in 1954, it is the significant increases in production and exports that are of great interest. According to the Canadian Index of Industrial Production, the annual growth of textile production has averaged more than eight per cent in the past several years. Figures for the last month of 1965 reveal that, on an individual basis, the wool goods index was 7.7 per cent higher than in December 1964; cotton goods were up 18.3 per cent, and synthetic textiles (and silk)

⁽¹¹⁾ Woollen textile plants in particular were hard hit during this period.

⁽¹²⁾ Estimate of the Canadian Textiles Institute.

were up 17.7 per cent. Ontario's index for all textiles (excluding clothing) shows increases in 1964 and 1965 of 9.1 per cent and 9.2 per cent respectively.

As for exports, the Fabric Market table points out the great expansion which has taken place in just seven years.

Future Prospects

In spite of the remarkable performance of recent years, the textile industry in Canada still faces important problems. In its competition with low-wage countries, the Canadian textile industry has to depend upon quotas in order to obtain an adequate share of the domestic market. As such, quotas remain the key to continued expansion both at home and abroad.

This is not the only problem. By far the most

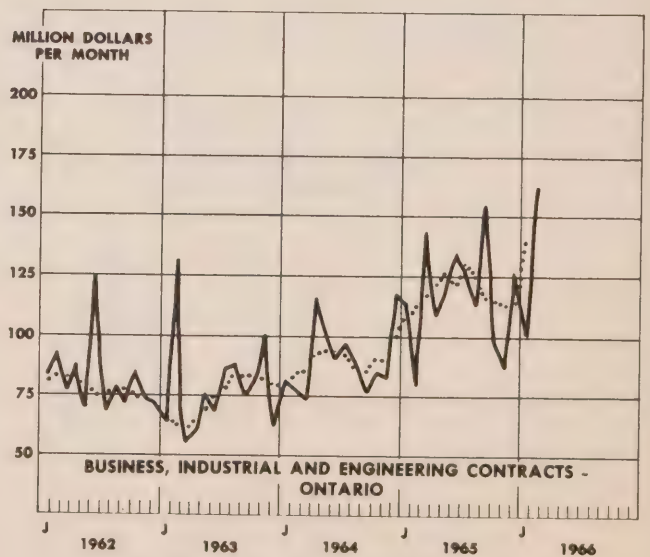
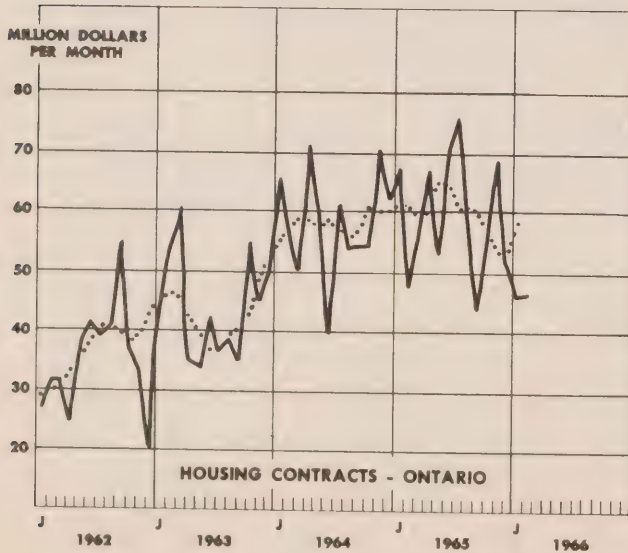
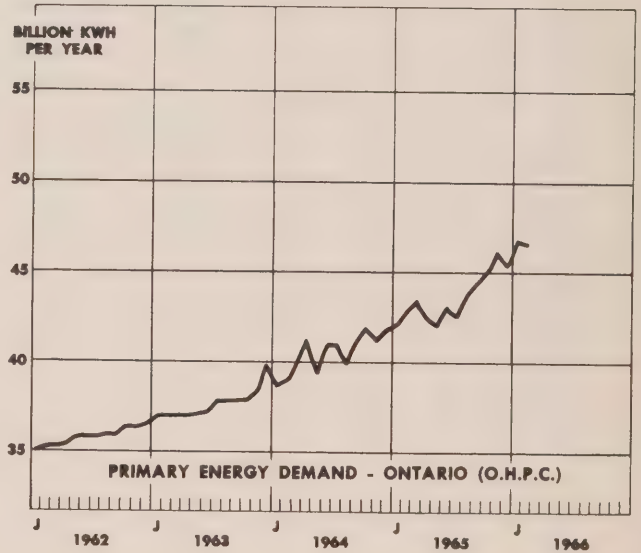
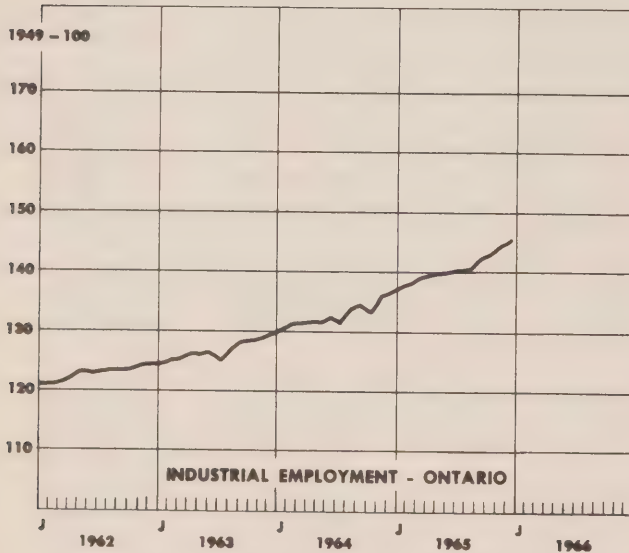
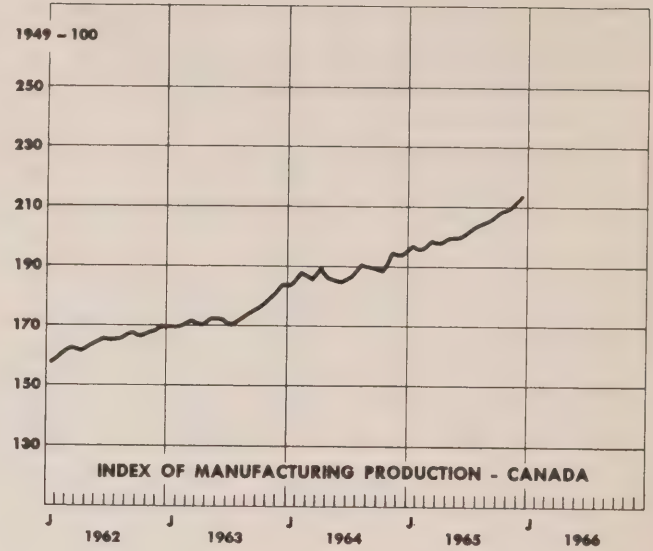
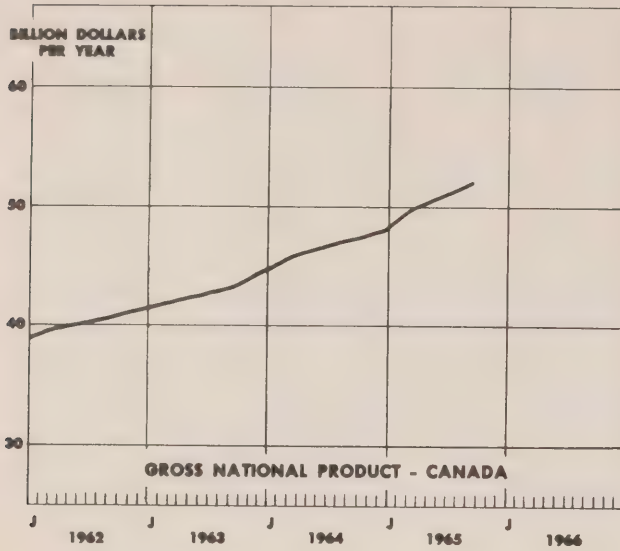
significant competitors of Canadian textiles are the United States producers. They have been able to take up a substantial portion of the Canadian market because of their long production runs, made possible by a large domestic market. From the point of view of the Canadian industry, therefore, tariffs remain a vital and necessary measure if the industry is to have some compensation for this inherent disadvantage.

But quotas and tariffs should never prevent an industry from maximizing its competitiveness. With them should come a concerted effort on the part of the industry to improve production techniques, to apply the latest technology and to achieve greater economies of scale. Only in this way will they be justified. At the same time this should conceivably lead Canadian textiles to a more competitive role in world markets.

ONTARIO ECONOMIC INDICATORS - SEASONALLY ADJUSTED (*Figures for Canada)

	1965	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1966
LEADING INDICATORS														
Average Weekly Hours Worked in Manufacturing	(No.)	41.0	40.3	41.7	41.5	41.0	41.3	40.8	40.9	40.7	41.1	41.4	42.2	
New Dwelling Unit Starts	(No.)	4,107	5,815	5,353	3,848	5,010	5,806	4,770	7,377	4,464	3,764	4,708	4,634	5,805
Business Failures	(No.)	90	77	130	67	87	65	63	83	79	70	71	69	72
Business Failures - Liabilities	\$ Million	3.4	10.3	8.9	4.0	5.3	4.6	4.0	20.7	9.5	2.6	3.4	3.2	4.9
New Orders in Manufacturing*	\$ Million	2,684	2,793	2,870	2,827	2,834	2,829	2,849	2,909	2,897	3,005	3,014	3,103	2,987
Outstanding Contracts	\$ Million	67.9	48.1	57.9	67.3	53.7	70.9	76.2	59.1	44.3	56.6	68.9	51.9	46.4
Business, Industrial and Engineering Contracts	\$ Million	113.5	80.3	143.9	109.3	117.9	135.9	127.8	115.0	155.7	98.1	87.6	125.8	101.8
Money Supply*	\$ Million	17,855	18,065	18,289	18,557	18,683	18,716	19,172	19,639	19,654	19,786	19,747	19,770	19,758
'S.E. Index - 77 Stocks	1956 = 100	170.9	172.8	170.7	171.1	169.5	163.0	163.9	166.8	171.4	174.2	167.7	168.1	171.2
														169.8
COINCIDENTAL AND LAGGING INDICATORS														
New Dwelling Unit Completions	(No.)	3,667	3,727	8,392	7,115	4,518	4,019	2,153	4,075	3,269	2,830	3,825	4,570	5,553
Average Hourly Earnings in Manufacturing	\$	2.19	2.20	2.23	2.23	2.22	2.23	2.23	2.23	2.26	2.28	2.29	2.26	
Gross National Product*	\$ Million	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheques Cashied in Clearing Centres	\$ Million	3,773	3,869	3,981	4,127	4,211	4,097	4,184	4,634	4,287	4,313	4,363	4,526	4,687
Retail Trade	\$ Million	617	631	641	659	672	665	672	669	667	694	703	697	695
Labour Force	000's	2,614	2,592	2,590	2,594	2,607	2,626	2,626	2,642	2,608	2,605	2,621	2,641	2,675
Employed	000's	2,542	2,524	2,531	2,522	2,536	2,548	2,556	2,574	2,541	2,556	2,562	2,582	2,612
Unemployed	000's	72	68	59	72	71	78	72	68	67	49	59	59	63
Unemployed as % of Labour Force	%	2.8	2.6	2.3	2.8	2.7	3.0	2.7	2.6	2.6	1.9	2.3	2.2	2.4
Wages and Salaries	\$ Million	825	823	843	849	854	861	868	874	888	895	908	918	
Industrial Employment	1949 = 100	137.9	138.2	139.3	139.8	140.1	140.5	140.7	140.9	142.5	143.3	144.8	145.7	
Total Industrial Production*	1949 = 100	224.3	223.1	226.7	225.5	225.4	225.9	228.5	232.4	234.4	236.4	239.6	242.3	242.6
Total Manufacturing		197.2	195.9	199.4	198.2	200.3	200.2	203.1	204.8	206.2	209.4	210.6	213.9	215.0
Non-Durables		191.4	189.8	188.9	189.3	193.2	190.9	194.6	195.8	197.5	200.3	200.5	202.8	204.1
Durables		203.9	203.1	211.8	208.6	208.5	211.1	213.1	215.4	216.2	220.0	222.4	226.8	227.9
Mining		348.3	343.3	347.5	348.7	332.7	336.9	339.3	354.8	360.6	340.6	360.6	365.1	349.0
Electric Power and Gas Utilities		429.6	437.4	441.8	435.8	431.8	433.5	431.6	449.8	454.5	480.6	482.7	471.3	489.9
Primary Energy Demand (Annual Rate) B KWH		42.13	42.86	43.46	42.52	42.14	43.06	42.59	43.67	44.51	44.98	46.11	45.50	46.71
														46.60
ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED*														
Domestic Exports	\$ Million	569.1	538.3	685.5	645.0	745.7	717.6	770.4	685.7	701.0	772.0	897.3	795.5	
Imports for Consumption	\$ Million	559.5	551.0	729.9	698.2	736.9	795.0	732.4	660.5	725.0	763.7	895.1	791.5	
Foreign Exchange Reserves	US \$ Million	2,668	2,649	2,554	2,567	2,499	2,480	2,492	2,598	2,614	2,644	2,681	2,665	2,548
Prices, Industrial Materials	1935-39=100	256.7	255.3	256.3	256.6	258.5	260.4	259.5	260.9	260.4	259.3	259.4	261.3	269.9

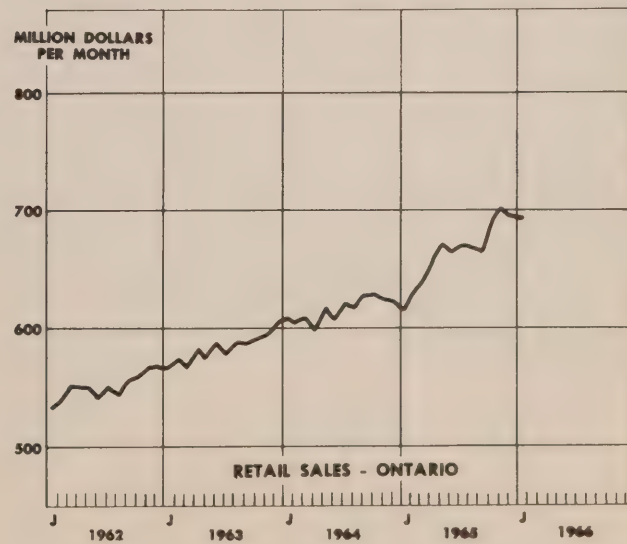
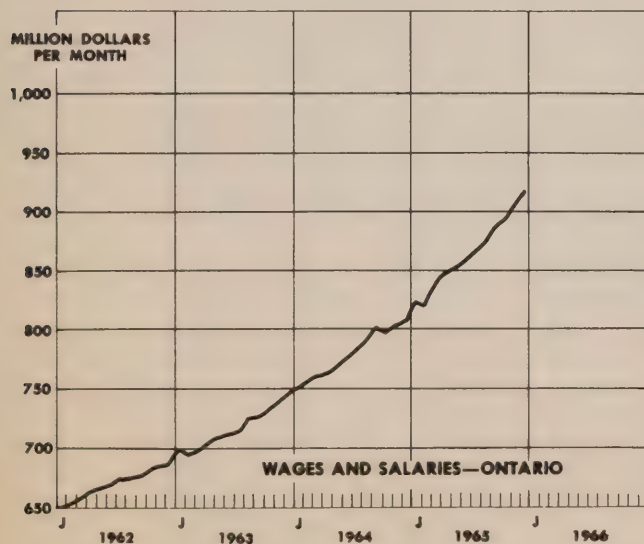
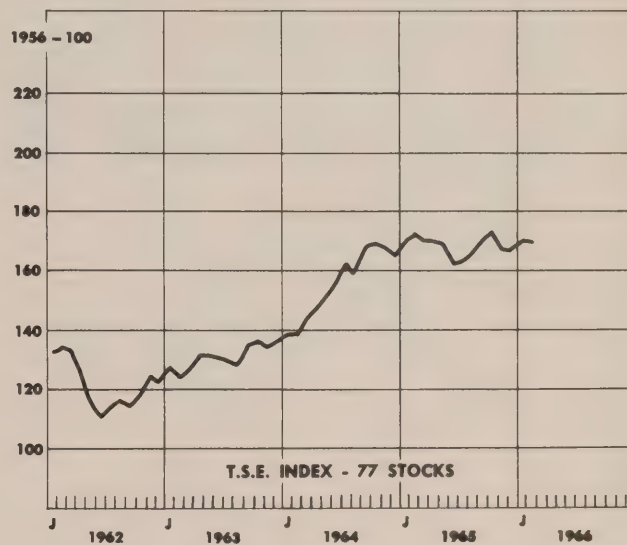
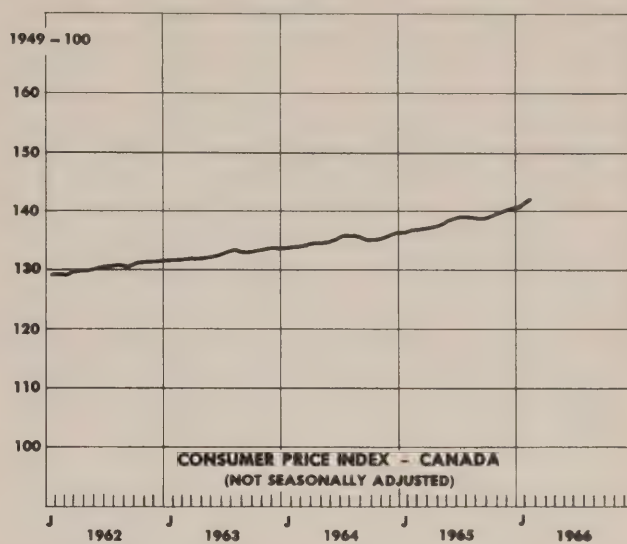
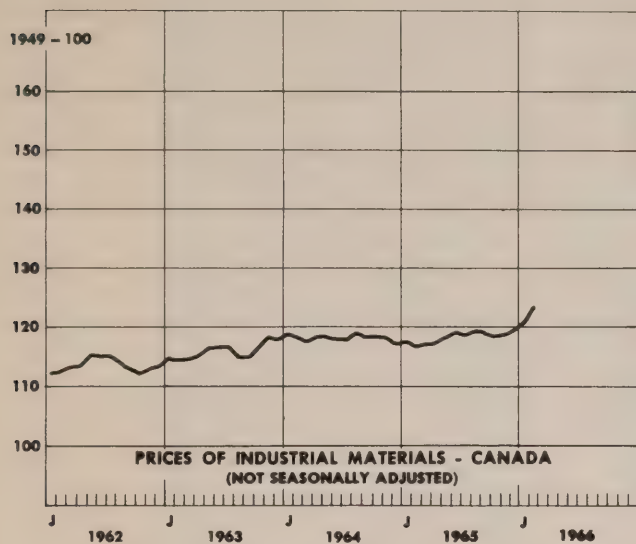
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



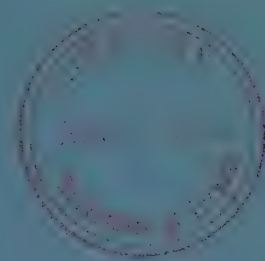
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— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



PERSONALS READING ROOM
(Economics and Social Sciences)



ONTARIO ECONOMIC REVIEW



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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

OFFICE OF THE CHIEF ECONOMIST

H. Ian Macdonald, Chief Economist

CONTENTS

The Ontario Economy	1
“The New Economics” and the Province of Ontario, H. Ian Macdonald, Chief Economist, Province of Ontario	4
Indicators and Charts	10

The Ontario Economic Review is prepared and edited monthly in the Economic Analysis Branch of the Department of Economics and Development and is available free of charge. The review is intended to provide current information on economic activity in Ontario and to act as a forum for the results of research in the public service on matters affecting the Ontario economy. The signed articles reflect the opinions of their authors and do not necessarily represent the views of the Economic Analysis Branch. All correspondence should be directed to the Editor, Ontario Economic Review, Economic Analysis Branch, Department of Economics and Development, 950 Yonge Street, Toronto 5.

THE ONTARIO ECONOMY

The economy continued to record impressive increases in the first several months of 1966, although there were occasional declines, notably in construction. Steel ingot production was up 9.3 per cent from one year ago, with Canadian production in March reaching a near-record level of 873.1 thousand tons. The Index of Industrial Production in February rose to 245.1 (based on 1949 = 100), almost 10 per cent higher than February 1965.

April construction contract awards in Ontario, at \$185.5 million, were down 7.5 per cent from last year; yet on a total four-month basis they were up over 10 per cent. Housing starts numbered 2,099 units in March, and were more than 15 per cent lower than March 1965. However, at month-end there were almost 10 thousand more units under construction this year than last year.

Ontario's retail sales in the first month of the year were valued at \$628.3 million, reflecting a gain over last year greater than in the rest of Canada. The total gain for Canada — 7.6 per cent — was made up of an 8.8 per cent increase in Ontario and a 6.9 per cent increase in the rest of the country.

Production

Steel ingot production rose to 873.1 thousand tons in March, approaching the monthly record of 880.1 thousand tons set in May, 1965. The March production figure represents a twelve-month increase of 9.3 per cent. In the first three months of this year, production was valued at 2,525.7 thousand tons — up 6.6 per cent from the same three-month period last year.

Canada's industrial production rose by 1.0 per cent in February, according to the D.B.S. Index of Industrial Production. The seasonally-adjusted Index rose to 245.1 that month from a January level of 242.7 (based on 1949 = 100). All three major components of the Index — mining, manufacturing, and electric power and gas utilities — contributed to the increase.

The mining index displayed the greatest growth, rising by 4.1 per cent, mainly on the basis of higher levels of production in metals — especially zinc.

Manufacturing production was up 0.4 per cent, with non-durables and durables contributing almost equally. Most non-durables shared in the gain,

with the exception of foods and beverages, rubber products, leather products and textiles. The most significant increases were recorded in paper products, clothing and products of petroleum and coal. In durables the gains came principally from increases in electrical apparatus and supplies, non-metallic mineral products and transportation equipment — particularly motor vehicles.

Production of electric power and gas utilities rose 1.1 per cent in February.

Comparing the February figures for 1966 and 1965, there has been a significant increase of 9.9 per cent in the overall Index of Industrial Production. Manufacturing production has been one of the major contributors, with non-durables up 8.0 per cent and durables 12.7 per cent. It is the impressive growth of the transportation group — up 22.7 per cent — which stands out over the period. Yet both iron and steel products and electrical apparatus and supplies have also played an important part.

In January, the estimated value of manufacturing shipments originating in Ontario was recorded at \$1,505.9 million, down from December, but up 18.3 per cent from January 1965. Much of this gain can be attributed to the very substantial increase in motor vehicles and parts shipments, demonstrating the benefits of the United States-Canada Automotive Free Trade Agreement. It was signed just one year earlier in January, 1965.

Construction

Unadjusted data for April indicate that total construction contract awards in Ontario, at \$185.5 million, were down 7.5 per cent from April 1965. However, on the basis of the total for the first four months of 1966, Ontario's awards were up 10.7 per cent from the same period last year, mainly on the strength of large increases in February and March. Awards in the first four months were \$669.8 million this year as opposed to \$604.9 million last year.

"Big Jobs" in Ontario — those valued at \$1 million and over — accounted for almost one-half of the value of awards in the province in April. At \$89.2 million, they represented over one-half of the "Big Jobs" total for Canada. Some are listed in the following table:

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ million</i>	<i>Description</i>
Chinguacousy Twp.	2.0	Plant addition
Cornwall	3.8	High school
Don Mills	21.7	Centennial centre
Don Mills	7.0	Office building
Fenelon Falls	1.5	School addition
Georgetown	1.0	Plant
Guelph	2.7	School
Hamilton	2.5	Office building
Kingston	1.0	Home for the aged addition
Lanark	1.1	Home for the aged
London	1.5	University buildings
Ottawa	2.4	Wind tunnel
Port Perry	2.3	School addition
Sarnia	1.5	Apartments
Stoney Creek	1.0	Apartments
Toronto	4.8	Rapid transit structures
Toronto (metro)	11.7	Apartments
Wallaceburg	2.5	Canning plant
Waterloo	3.3	University residence
Woodstock	1.2	Hospital addition

During March, the most recent month for which a detailed breakdown is available, the seasonally-adjusted value of housing contracts was \$79.6 million, up 71.6 per cent from the previous month. This represented, as well, a 37.5 per cent increase over March 1965. Similar data for business, industrial and engineering contracts indicate that, at \$218.2 million, they were up 34.0 per cent from February's level of \$162.8 million, and were 51.6 per cent higher than in March 1965.

Dwelling unit starts in Ontario centres of 5,000 population and over numbered 2,099 units in March (unadjusted data), a decline of 15.1 per cent from March 1965. Increases in Metropolitan Toronto and Hamilton were not able to offset the declines in other centres in the province.

For the first three months as a whole, however, Ontario housing starts were up 4.0 per cent from the comparable 1965 period. These numbered 6,912 dwelling units as opposed to 6,646 units last year. Completions, at 12,184 units, were down 4.6 per cent from the January-March period of 1965.

At March 31st, dwelling units under construction numbered 47,916, almost 10 thousand more than at that time last year.

Sales and Credit

Ontario retail sales in the first month of 1966 were valued at \$628.3 million, an increase of 8.8 per cent over January 1965. This was somewhat higher than the 6.9 per cent increase in the rest of Canada. Together the total for Canada came to \$1,611.2 million in January — reflecting a 7.6 per cent increase in one year's time. Lumber and building material stores experienced the greatest degree of growth in Ontario over the twelve-month period, rising 27.5 per cent. They were followed by hardware stores and shoe stores, each with gains of over 18 per cent. Clothing, department and variety stores also showed substantial increases of over 10 per cent. Restaurants, grocery stores and general stores had the smallest twelve-month increase, not achieving any more than a two per cent increase. None of the groups declined.

Wholesale sales across the nation rose 9.2 per cent, comparing the 1965 and 1966 figures for January. Preliminary estimates place this year's January value at \$933.4 million. By far the largest increase was in farm machinery, where sales rose over 70 per cent. The group containing lumber and special types of construction materials rose 20.2 per cent. In general, meats, foods, drugs, paper products and building materials were significant in terms of growth as well.

January credit statistics reveal that outstanding credit balances for consumers across Canada generally were about 14 per cent higher than in January 1965. Credit balances of sales finance companies, small loan companies and department stores were nine to 13 per cent higher. Personal loans from chartered banks were 22 per cent higher for non-secured loans, 15 per cent higher for fully secured loans and less than three per cent higher for home improvement loans.

Foreign Trade

Canada's imports and exports in February both were substantially higher than one year ago, according to D.B.S. estimates. Yet, from all indications both would have been even higher had it not been for the truckers' strike in Ontario.

Total exports for the month were recorded at \$694.7 million, 25 per cent greater than in February 1965; imports, too, were up — at \$660.9 million they were 20 per cent higher. The result was a favourable export balance of \$33.8 million, compared with one of \$6.3 million one year earlier.

It would appear that the Ontario truckers' strike affected imports from the United States more than anything else. At \$473.0 million in February, they

were only 16 per cent higher than last year. Exports, on the other hand, rose to a level of \$424.7 million — up 26 per cent. This reduced the February import balance with the United States from \$71.1 million in 1965 to \$48.2 million in 1966.

In its trade with the United Kingdom, Canada increased its purchases to \$58.8 million; more than \$10 million of this, however, was accounted for by non-recurrent deliveries of defense equipment. Twelve months earlier imports had been valued at \$40.6 million. Exports, at \$31.5 million, were \$8.0 million less than they had been last year.

Imports from other commonwealth and preferential rate countries were valued at \$22.5 million in February, a rise of 35 per cent over last year; exports were much less impressive, rising only five per cent to \$33.0 million. Trade with all remaining countries showed large increases over last February, with imports rising 24 per cent to \$106.7 million, and exports 34 per cent to a level of \$146.7 million.

Taking the first two months together, exports and imports were again considerably higher this year than last year. Exports were 26 per cent higher at \$1,438.3 million, while imports were up 23 per cent to a two-month total of \$1,364.8 million. The export balance rose from \$33.6 million in 1965 to \$73.5 million in 1966.

Government of Ontario Regional Development Policy

Ontario's regional development policies strive for regional economic specialization which will contribute to total environmental development.

This was one of the important points brought out in "Design for Development", a 25-page policy statement introduced by the Prime Minister on April 5, 1966. The statement stressed that regional economic inequalities would be smoothed out by programs which encouraged labour mobility, tourism, agriculture and other forms of economic activity.

In order to assist new businesses in remote areas, an Ontario Development Corporation would be set up to loan money to businesses unable to obtain finances from other lending agencies.

Legislation was to be introduced immediately to create Regional Development Councils. These Councils would be given sufficient financial and professional resources so that there would be more effective regional participation in development planning.

The Prime Minister stressed that every effort would be made to assist individuals in developing their full capacities. No new forms of government would be imposed. On the contrary, a two-way com-

munication between the Province and local interests would be encouraged, so that local initiative, responsibility and advice could be taken into consideration.

It was stressed that there was a need to co-ordinate public expenditures on a regional basis. Regional policies would be "cast in the mould" of Ontario's conditions and not borrowed from other jurisdictions. The paper emphasized the need for research and co-ordination of departmental activities.

The Government introduced a nine-point program for regional development which aims to be a "forward looking" design for development:

- (1) There will be a Cabinet Committee chaired by the Prime Minister which will coordinate regional plans pertaining to growth and development within the province. This will necessitate priority planning of government expenditures.
- (2) There will be a senior Departmental Advisory Committee to advise and assist the Cabinet Committee.
- (3) The existing Regional Development Associations shall be formed as advisory citizen bodies and named Regional Development Councils.
- (4) The present Ontario Development Agency will be called the Ontario Development Corporation and will assist industrial development by providing loans for fixed capital.
- (5) Comprehensive regional research will be undertaken to provide the basis for regional planning. The research will include analysis of resources potential, goods and services now available, income patterns and labour force characteristics.
- (6) The Department of University Affairs will encourage regionally-related research in the universities.
- (7) Development plans will be based on the concept that regional growth centres are the unifying social and economic force within the region.
- (8) A Regional Advisory Board composed of civil servants in the region will advise the senior Departmental Advisory Committee on regional matters.
- (9) Finally, an attempt will be made to establish common administrative and planning regions among the operating departments and agencies of the Ontario Government.

"THE NEW ECONOMICS" AND THE PROVINCE OF ONTARIO

H. IAN MACDONALD
Chief Economist, Province of Ontario

THE OLD...

In his *Essays in Economics*, the late Professor Pigou of Cambridge tells the story of a young civil service economist in a former British dependency being asked to undertake an economic study. "Before I commence," he remarked, "would you please tell me what answer to the question the government wishes me to find?" The illustration raises some interesting questions about the scope and function of an economic advisory service in a complex, modern government. Economists in the civil service have a clear responsibility to seek answers to policy questions posed by the government and, in proper professional manner, to point out the costs and benefits of various courses of action. Traditionally, the responsibility perhaps extended no further. Now, however, government has become an organic part of the body economic and not only its policies but its very existence will, inexorably, have a profound influence on the economic climate and economic performance. In Ontario, a budget of \$1.8 billion in a Gross Provincial Product of over \$20 billion is a not insignificant item. Consequently, the economist in government must engage in fundamental research of a very basic kind; he must look forward and outward as well as inward at existing conditions. A government would not launch a rocket to the moon without a long period of scientific inquiry. Whereas the dimensions of the barrier may not be as great in governmental activity at the terrestrial level, the research must be at least as carefully designed and executed. Although the results may not be as dramatic as landing a man on the moon, the number of people affected is undoubtedly greater.

Just as the increase in the relative role of government has evoked more intensive economic research among governments, a contemporary feature of Canadian federalism has decreed that developments at the provincial level should be particularly pronounced. The burgeoning of activity in areas assigned constitutionally to the provinces — education, health, welfare, highways among others — has produced a notable shift in the balance between federal

and provincial-municipal activity. Over 55 per cent of government expenditure in Canada now rests with the provincial and municipal governments and over 80 per cent of public investment is placed by these two levels of government. There can be no escape from the consequences of these facts; a large measure of fiscal policy is now the responsibility of the provinces in general and of Ontario in particular. In this trinity of forces — federal, provincial, and municipal, the province occupies the delicate position of fulcrum.

Not surprisingly, note has been taken in recent public discussions of the developing interest and activity by provincial governments in the field of economics. However, it would be improper as far as Ontario is concerned to create the impression that the tradition of a skilled economics service was at all a recent one. On the contrary, the economic research function in the Ontario Government has a long and distinguished history and the professional standards of the staff are well implanted. From the time of the establishment of the Bureau of Statistics and Research in 1943, the function has grown steadily although the location and responsibilities have varied. At that time, the Bureau was a branch of the Treasury Department, to which a small staff was appointed, charged with the comprehensive task of "keep(ing) constantly under review all matters relating to the economy of the Province of Ontario."¹

The Bureau enjoyed immediate and marked success, and, from the very beginning, its role underwent change as it became more apparent that there was a need for an expanded viewpoint in economic affairs. The significant transition from what had been primarily a fact-finding and collating role to an implication-analysing function was marked by the creation, in 1952, of the Office of the Provincial Economist. In turn, this Office absorbed the original Bureau of Statistics and Research in 1954.

Under the guidance of Mr. George Gathercole, the first Provincial Economist, a new era for econom-

¹ Hon. Leslie M. Frost, Provincial Treasurer, in his Budget Address on March 16, 1944.

ic study in the Ontario Government was introduced by the creation of a Department of Economics in early 1956. In his Estimates Speech, the Provincial Treasurer, the Hon. Dana Porter remarked: "The work (of the Office of the Provincial Economist) has gone beyond the ordinary functions of the Treasury Department, which are sufficiently onerous in themselves, and in some respects, of a different nature . . . (the Office) has established a status and a reputation which leads us to believe that it is in the interest of the development of this branch of the service that it should set up as a separate department". For that year, the Estimates called for a budget of about \$164,000. The Department performed a function and had a peculiar flavour quite unlike any other, in recognition of the growing role of the provincial government in economic life. As the Provincial Treasurer described in the same speech: "It (the Department of Economics) is a department, the particular function of which is to look at the problems of the government as a whole, from an economic point of view, in a comprehensive way, rather than from the viewpoint of one department." Finally, in the period 1960-61, proper recognition was given to the important responsibility for intergovernmental relations which had grown within the Department from the beginning of the old Bureau. In that brief period, the "Department of Economics and Federal-Provincial Relations" appeared on the statute books as the new designation.

Before the end of 1961, the Department of Economics and Federal-Provincial Relations was merged with the Department of Commerce and Development to form the Department of Economics and Development.⁶⁹ Economics was now wedded to the promotional and developmental functions of trade and industry as a means of enlarging the opportunities for the province's expansion and development. During the period 1961-64, the economics and statistical functions of the new department consisted of three principal research units: the Economics Branch, the Financial Research Branch, and the Special Research and Surveys Branch. In anticipation of events to come, Regional Development Services, a unit which had maintained liaison with the various Regional Development Associations and which had pioneered in the "regional development movement" was attached to this grouping early in this period, and an incipient Statistics Branch, with a small staff, was developed toward the end of 1964.

⁶⁹The Department of Commerce and Development had been formed early in 1961 to absorb the former Department of Planning and Development.

...AND THE NEW

On January 1, 1965, the Office of the Chief Economist was established in the Department of Economics and Development to draw together, in a single focus once more, the various elements required to create a centralized economics and statistical service. This development was the outgrowth of a number of factors. In the first place, as we have noted, the responsibilities for economic research required co-ordination and integration. In the second place, the acceleration in the pace of economic investigation and research had to be accommodated in a systematic manner. Finally, an explicit division within the Department of Economics and Development was required not only to draw together the old functions of economic policy and federal-provincial relations along with the extended scope in regional development, economic planning, and statistics, but also to provide leadership for the economic research units throughout the government.

The primary objective of a strengthened and broadened economic research and statistical service is a more effective provision of economic and statistical information and advice for the Prime Minister and Cabinet, for the Department of Economics and Development, and for individual ministers and senior civil servants in other government departments. Accordingly, the Office of the Chief Economist has been assigned the following broad responsibilities:

- (i) to act as senior economic adviser to the government on economic policy matters;
- (ii) to direct the central economic research and statistical operation;
- (iii) to co-ordinate economic research and policy among the various provincial agencies, including the Ontario Economic Council;
- (iv) to direct research and co-ordinate activities in the area of federal-provincial affairs;
- (v) to administer the Ontario Statistics Act.

It is also understood that the Chief Economist will study the basic requirements for the most effective organization and research co-ordination throughout the government and make recommendations for fundamental changes and improvements.

In broad terms, it might be said that the objective for this Office should be the performance of the prime function recommended by the Glassco Commission to the Federal Government for such a central service: "... to undertake the conduct of central economic analysis for the purpose of aiding the development and co-ordination of general economic

policy". To fulfil such a role, the Office of the Chief Economist must be equipped to undertake economic analysis, provide economic intelligence, and initiate specific economic investigations of a general nature on "matters of pervasive significance for the whole of the economy."

During 1965, an intensive study was launched into the logic of the existing arrangements and branch structure. Early this year, a new organization was introduced as a basis for the expansion and complete revision of the previous arrangements. Reconstruction has involved a complete alteration in branch structure. The three economics branches were abolished and replaced by five new units, namely: the Economic Planning Branch, the Economic Analysis Branch, the Applied Economics Branch, the Regional Development Branch (absorbing the Regional Development Services unit), and the Federal-Provincial Affairs Secretariat. The Statistics Branch will undergo such a transformation in the process of being converted into the Ontario Statistical Centre as to constitute a new body as well. Partly, these changes represent old wine in new bottles although there is also a high proportion of new wine. The approved complement, expanded from 63 to 76 in 1965, will increase to 135 in the fiscal year 1966-67 and the budget for the Office of the Chief Economist to \$1,289,000.

The form of reorganization has been designed both to take account of the increasing sophistication of economic analysis and the greater complexity of economic policy and to provide for new machinery of government organization at the policy level. In particular, the structure has been designed to meet three governmental developments and to provide the necessary research functions in support of these developments.

In the first place, the 1966 Budget Statement described the government's intention to establish clear policy priorities to assure that expenditures will make the greatest contribution to the development of the province, to plan its financial and economic activity to achieve maximum effectiveness, to co-ordinate government policies and programs such as those designed to contribute to the economic development of all regions of the province, and to view all policies in the context of federal-provincial-municipal relationships. To assist in meeting those objectives, the government has decided to establish a three-man committee of senior economic and financial advisers, consisting of the Chief Economist, the Secretary of the Treasury Board, and the Deputy Provincial Treasurer. In the second place, the "Design for Development" tabled in the Legislature on

April 5, 1966 announced the formation of a Cabinet Committee, with broad terms of reference, to be concerned with the inter-related processes of policy, priorities, planning, and co-ordination of government activity; this statement also called for a greatly extended research function in the Regional Development Branch and in the various universities across the province. In the third place, the government wished to make provision for an orderly approach to federal-provincial affairs and for careful study and research into the complex framework of Canadian federalism.

With the machinery of government undergoing these additions and changes, it was clear that two supporting requirements had now to be developed within the context of such broad objectives. First, it was evident that a major breakthrough was required in the collection and use of provincial economic and administrative statistics. Such an advance must be capable of reaching beyond any limits previously contemplated for the provincial economy in Ontario. Second, the new organization must be equipped to service departments such as Education, University Affairs, Energy and Resources Management, and Labour, who are actively seeking economic guidance in planning for the future, and with whom all our efforts must assume a common course.

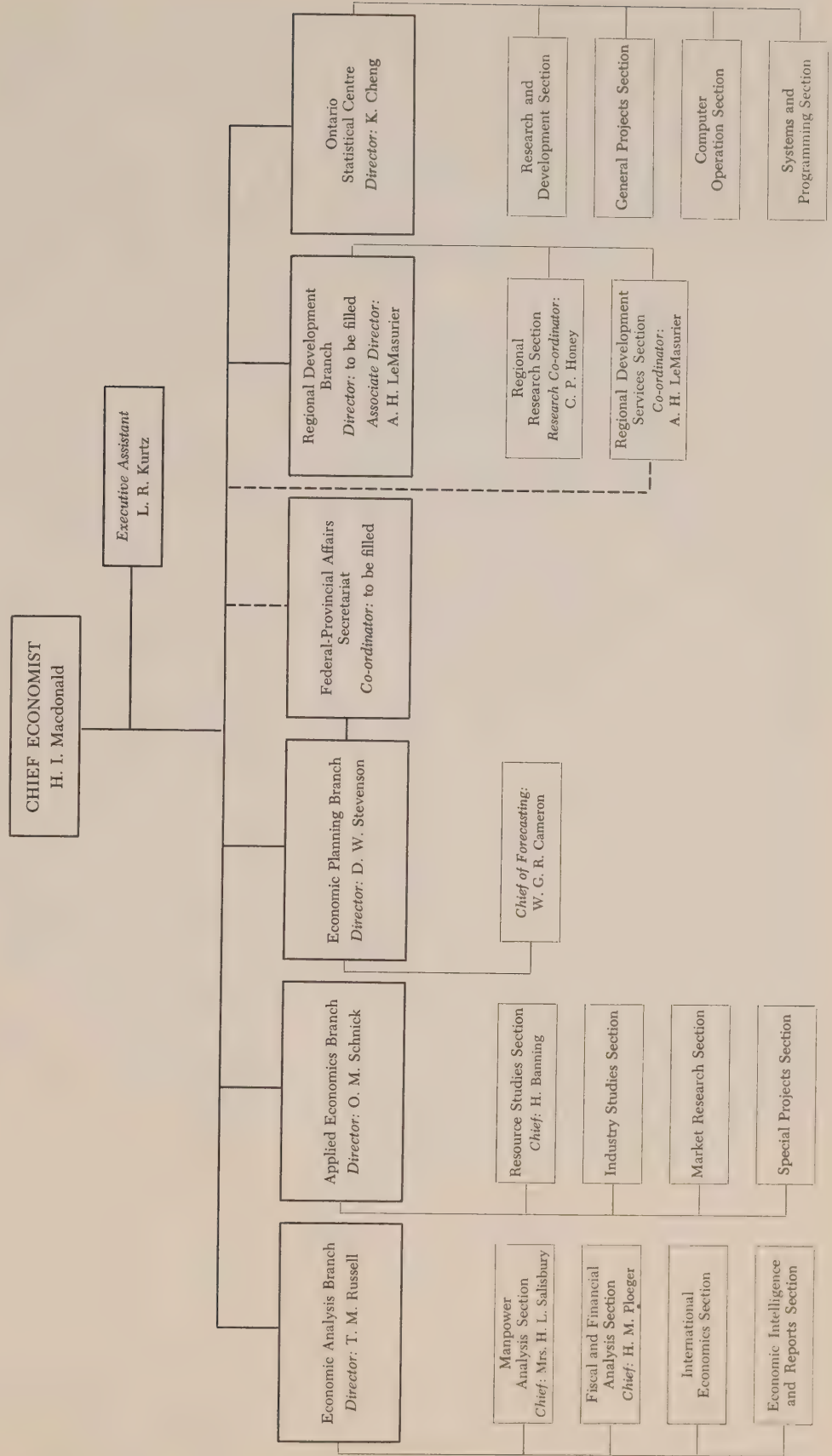
Of the six new units, it might be said that the Economic Planning Branch and the Federal-Provincial Affairs Secretariat will form the nerve centre with the other branches providing the arms and legs of the organization. In another sense, the work of three units — the Economic Planning Branch, the Federal-Provincial Affairs Secretariat, and the Regional Development Branch — will be directed toward the central planning functions of the Cabinet Committee and the need for an overview of government activity, while the other three — the Economic Analysis Branch, the Applied Economics Branch, and the Ontario Statistical Centre — will provide the analytical support and detailed research required in the overall operation.

THE FUNCTIONS OF THE NEW BRANCHES

(1) Economic Planning Branch

This branch will fill the need for long-range planning of government economic activity and investment. It should also provide a source of co-ordination and planning for the Office of the Chief Economist in assuring that, in the various research units of the government, all aspects of the provincial economy are reviewed in the context of future

ORGANIZATION OF THE OFFICE OF THE CHIEF ECONOMIST



requirements. As part of its role in studying the long-run requirements of the provincial economy on an overall basis, the branch will be charged with the work of building up long-run knowledge of the economy, forecasting probable and potential levels of economic activity, identifying bottlenecks and obstacles to economic growth and development, studying the long-term public investment requirements, and endeavouring to arrive at detailed explanations of economic changes and occurrences.

(2) Federal-Provincial Affairs Secretariat

The Secretariat has the dual function of undertaking research and study within the area of federal-provincial affairs, and co-ordinating the activities of Ontario government departments and agencies in the federal-provincial area, including the preparation and co-ordination of material for Federal-Provincial Conferences. In addition, the Secretariat should provide the necessary overview of federal-provincial affairs in support of the development of consistent government policy, through the maintenance of a continuing intelligence service in the broad areas of federal-provincial concern. The Secretariat is also undertaking much of the staff work for the Ontario Advisory Committee on Confederation in its advisory function to the Prime Minister.

(3) Economic Analysis Branch

The function of this branch is to carry out economic research work directed to keeping abreast of current developments, and to provide a central core of economic intelligence. As such, the first responsibility of this branch is to ensure the needs of the Prime Minister and other ministers for information on the Ontario economy and on economic conditions in general. In this process, the branch provides significant information on current and past economic phenomena as well as detailed study of economic variables affecting the provincial economy. It also carries out research into fiscal arrangements and federal-provincial economic and fiscal problems in support of the work of the Tax Structure Committee and its required analysis. The branch will also be developing detailed sectoral analysis in co-operation with the Ontario Statistical Centre. This should provide the necessary longer-run research insight into the structure of the provincial economy, upon which the Economic Planning Branch can base an appreciation of the impact and role of the government sector. Finally, the responsibility for providing the public with economic information on the Ontario economy is an added service provided by this branch.

(4) Applied Economics Branch

The function of this branch is to conduct economic investigations for the purpose of satisfying the immediate need for economic advice. Most of the studies are of a feasibility or implication-analysing nature. These studies serve the Department of Economics and Development in working out a program for Trade and Industry, the Ontario Housing Corporation, and the Ontario Development Agency.⁽³⁾ However, an even greater service is rendered to other departments such as Energy and Resources Management, Lands and Forests, Mines, Agriculture, and Highways, who request particular studies with implications beyond their own boundaries. As such, this branch will not only maintain a core of basic resource studies, but it will also provide services to other departments and their research sections. Already, work in fields such as transportation has grown markedly.

(5) Regional Development Branch

This branch is now composed of two sections. A new Regional Research Section will undertake research and prepare reports on the boundaries, and the economic base and potential of the regions of Ontario. This research will provide the basis required for the preparation and implementation of the regional development program and provide the basic research establishment in support of the regional development work of the Cabinet Committee. The Research Section will also provide field research officers as liaison with the regional activities of all government departments and agencies and co-ordinate the research that is undertaken in the universities across the province and by other outside bodies.

The Regional Development Services Section will continue to provide practical advice and assistance to the Regional Development Associations⁽⁴⁾, to co-ordinate their programs and activities, and to provide for liaison between government agencies and the Associations. The pioneer work of the Regional Development Services Section has been recognized across the province. Now that it is to be reinforced by a research staff, specializing in regional economics and planning, we are preparing to undertake a comprehensive examination of the problems and potential of the province's ten econo-

⁽³⁾ Legislation to convert the Ontario Development Agency into a new crown corporation, the Ontario Development Corporation, is presently before the Legislature.

⁽⁴⁾ Legislation to convert the Regional Development Associations into new Regional Development Councils is presently before the Legislature.

mic regions. The areas where co-ordinated attack is required will become abundantly clear in this process.

(6) Ontario Statistical Centre

The key to the effective and efficient operation of a central economic research service is the existence of a functional economic statistics centre. A nucleus for such an operation was gathered together at the end of 1964, and this branch is now becoming a core of basic information and data to the other branches as well as to the whole government. For these reasons, it has been designated the Ontario Statistical Centre.

The Centre administers the Ontario Statistics Act, 1962-63, and will eventually undertake input-output and provincial accounts flow studies upon which long-run financial planning may be based. In addition, it will collect, analyse, present or store information which has a statistical value, and process and publish statistics required by the province. It will design samples and conduct surveys for Ontario government departments. The Ontario Statistical Centre will co-ordinate and serve as a liaison among federal, provincial and municipal governments in matters concerned with statistics. It will also attempt to develop statistical standards, including a common coding and classification system, and will provide computer and programming services to Ontario government departments.

Another part of its work will be concerned with research requiring analysis and statistical theories. These activities will include plans to establish a General Purpose Information System with a Data Bank which would integrate available administrative data for development of statistical information, thus providing information for governments and industries of the province. This General Purpose Information System will improve timeliness of statistics, cost of production, and will reduce duplication in collection, processing and storage of data. The common information stored in the system will be

made accessible to all departments and industries in a usable form as far as is permitted by disclosure rules.

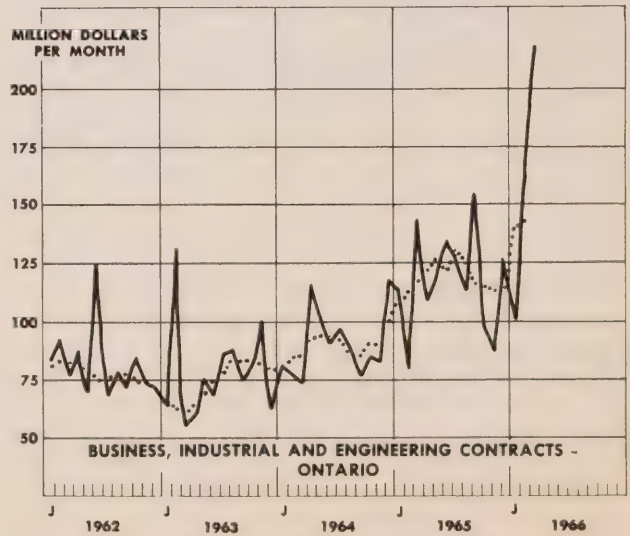
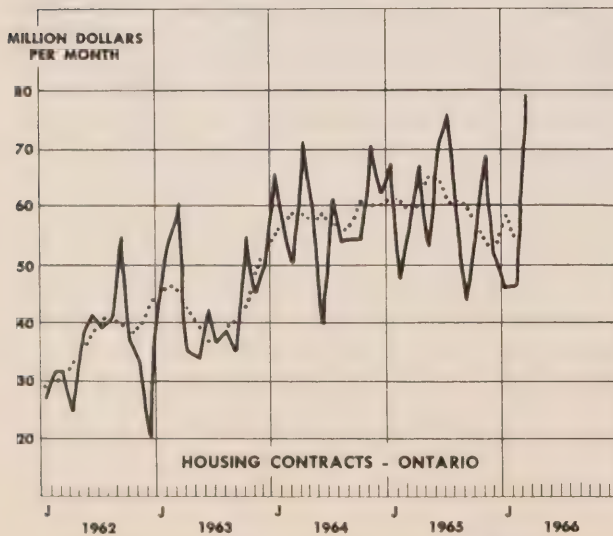
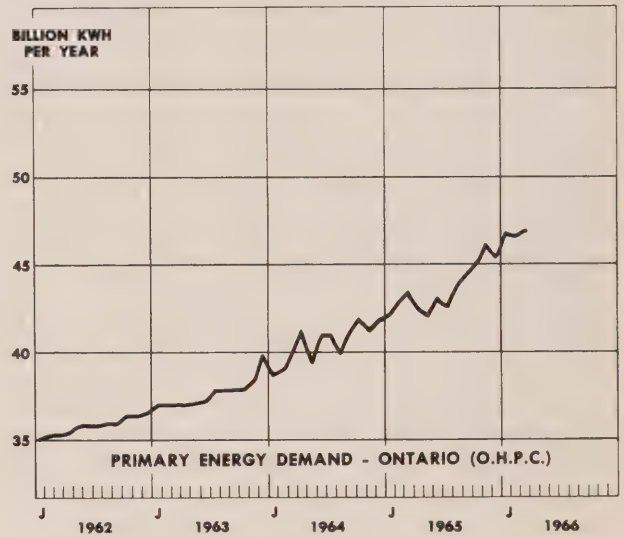
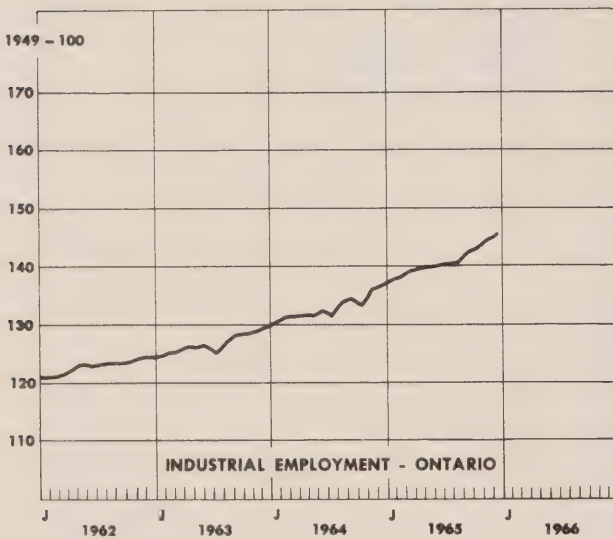
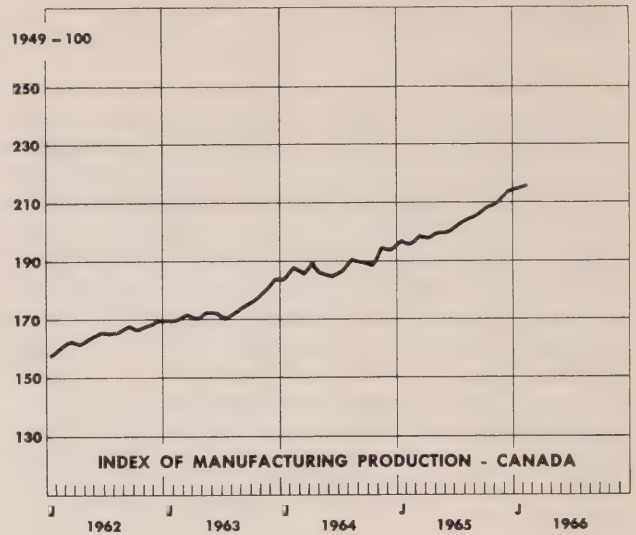
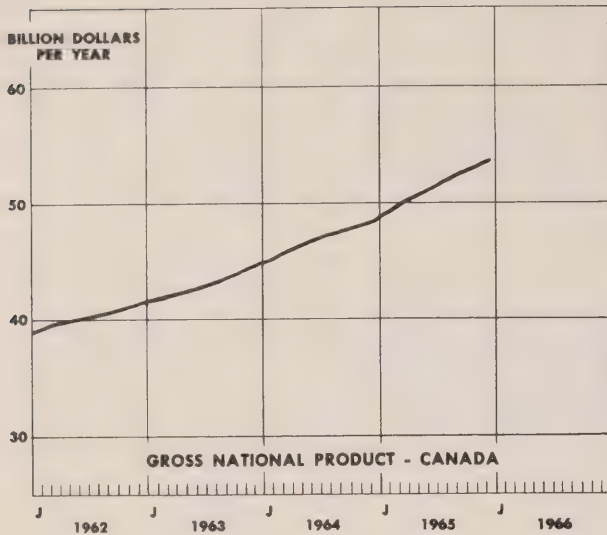
The Dominion Bureau of Statistics has welcomed the Ontario Statistical Centre, particularly since it should be one of the vehicles through which a glaring gap in a total statistical information system for Canada — that gap represented by the potential of administrative data — can be filled.

FROM HOPE TO FULFILMENT

The development of this research program involves a continuing buildup of personnel, particularly in the Statistical Centre, and much is yet to be done in hiring key personnel and in developing more explicit lines of research and exploration. However, we earnestly hope to avoid the pitfalls of the quantitative theory of quality. Our first objective is the provision of a high quality research team, capable of reaching toward new vistas. At the same time, we will be seeking the means to ensure more effective co-ordination of research and policy advice between the departments of the government. Just as regional development requires the active collaboration of all departments, effective research demands a united effort. During the summer, the various branches comprising the Office of the Chief Economist will be moved into the Treasury Building to make our central service more readily available to other departments. We shall be attempting to build an effective linkage within the whole network of economic research in the Ontario Government.

Lord Keynes once warned that "the theory of economists does not furnish a body of settled conclusions immediately applicable to policy." However, it is a proper objective for economists in the civil service to shorten as much as possible the gap in time and substance between their investigation and the formulation of government policy. The goal of this Office will be the fulfilment of that objective without any sacrifice of professional research standards.

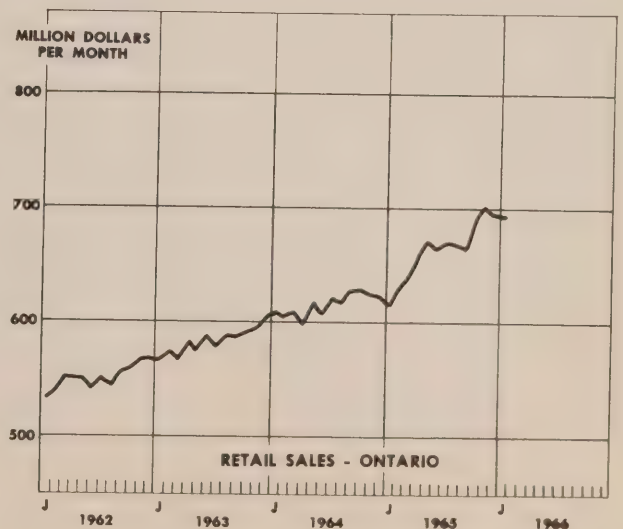
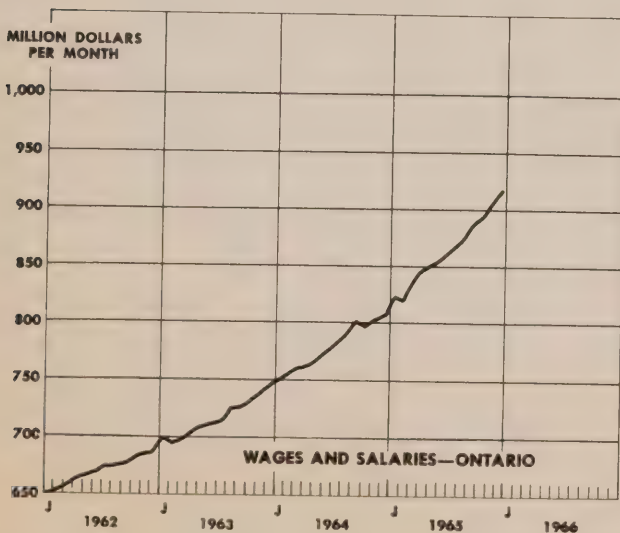
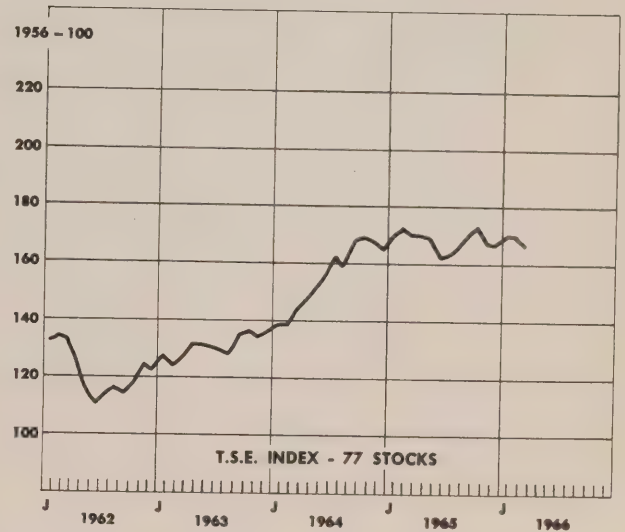
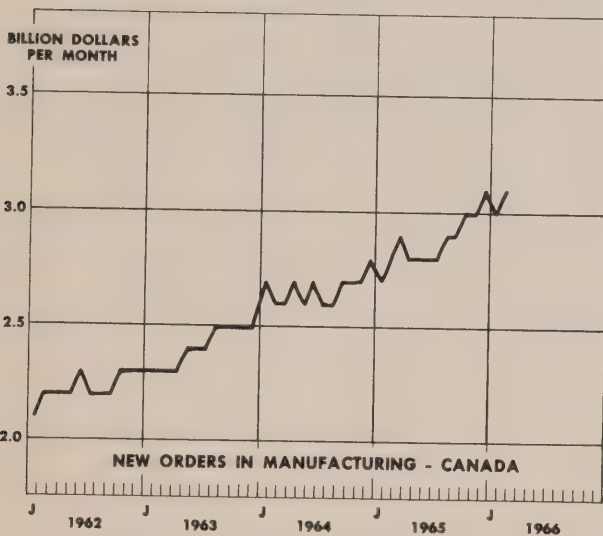
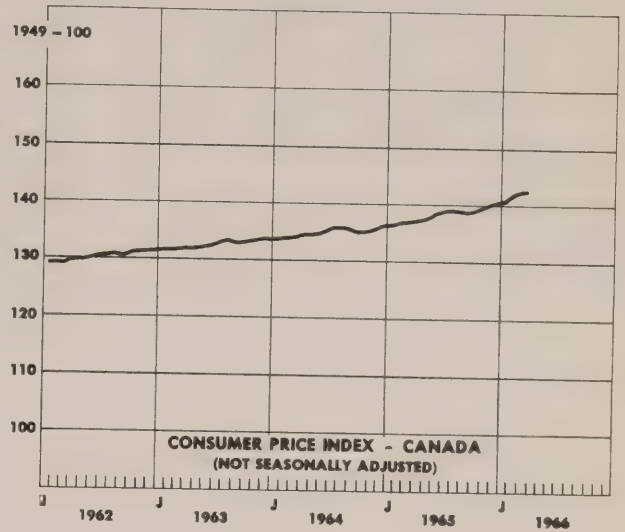
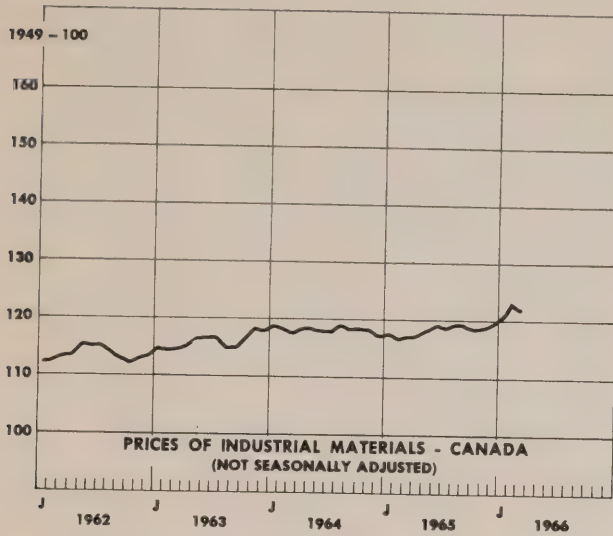
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



..... TREND CYCLE

————— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



ONTARIO ECONOMIC INDICATORS - SEASONALLY ADJUSTED (*Figures for Canada)

LEADING INDICATORS														-1966-
	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
Average Weekly Hours Worked in Manufacturing	40.3	41.7	41.5	41.0	41.3	40.8	40.9	40.7	41.1	41.4	42.2			
New Dwelling Unit Starts	5,815	5,353	3,848	5,010	5,806	4,770	7,377	4,464	3,764	4,708	4,634	5,805	76	91
Business Failures	77	130	67	87	65	63	83	79	70	71	69	72		
Business Failures - Liabilities	10.3	8.9	4.0	5.3	4.6	4.0	20.7	9.5	2.6	3.4	3.2	4.9	7.3	5.1
New Orders in Manufacturing*	2,793	2,870	2,827	2,834	2,829	2,849	2,909	2,897	3,005	3,014	3,103	2,996	3,106	
Housing Contracts	48.1	57.9	67.3	53.7	70.9	76.2	59.1	44.3	56.6	68.9	51.9	46.4	79.6	
Business, Industrial and Engineering Contracts	80.3	143.9	109.3	117.9	135.9	127.8	115.0	155.7	98.1	87.6	125.8	101.8	162.8	218.2
Money Supply*	18,065	18,289	18,557	18,683	18,716	19,172	19,639	19,654	19,786	19,747	19,770	19,758	19,814	
S. E. Index - 77 Stocks	172.8	170.7	171.1	169.5	163.0	163.9	166.8	171.4	174.2	167.7	168.1	171.2	169.8	167.1

COINCIDENTAL AND LAGGING INDICATORS

New Dwelling Unit Completions	(No.)	3,727	8,392	7,115	4,518	4,019	2,153	4,075	3,269	2,830	3,825	4,570	5,553	
Average Hourly Earnings in Manufacturing	\$	2.20	2.23	2.23	2.22	2.23	2.23	2.23	2.26	2.28	2.29	2.26		
Gross National Product*	\$ Million	- - - - -	-50,196	- - - - -	- - - - -	51,324	- - - - -	- - - - -	52,704	- - - - -	- - - - -	53,760		
Cheques Cashied in Clearing Centres	\$ Million	3,869	3,981	4,127	4,211	4,097	4,184	4,634	4,287	4,313	4,363	4,526	4,687	
Retail Trade	\$ Million	631	641	659	672	665	672	669	667	694	703	697	695	
Labour Force	000's	2,592	2,590	2,594	2,607	2,626	2,626	2,642	2,608	2,605	2,621	2,641	2,675	2,686
Employed	000's	2,524	2,531	2,522	2,536	2,548	2,556	2,574	2,541	2,556	2,562	2,582	2,612	2,629
Unemployed	000's	68	59	72	71	78	72	68	67	49	59	59	63	57
Unemployed as % of Labour Force	%	2.6	2.3	2.8	2.7	3.0	2.7	2.6	2.6	1.9	2.3	2.2	2.2	2.1
Wages and Salaries	\$ Million	823	843	849	854	861	868	874	888	895	908	918		
Industrial Employment	1949 = 100	138.2	139.3	139.8	140.1	140.5	140.7	140.9	142.5	143.3	144.8	145.7		
Total Industrial Production*	1949 = 100	223.1	226.7	225.5	225.4	225.9	228.5	232.4	234.4	236.4	239.6	242.3	242.7	245.1
Total Manufacturing		195.9	199.4	198.2	200.3	200.2	203.1	204.8	206.2	209.4	210.6	213.9	215.2	216.0
Non-Durables		189.8	188.9	189.3	193.2	190.9	194.6	195.8	197.5	200.3	200.5	202.8	204.3	205.0
Durables		203.1	211.8	208.6	208.5	211.1	213.1	215.4	216.2	220.0	222.4	226.8	227.9	228.9
Mining		343.3	347.5	348.7	332.7	336.9	339.3	354.8	360.6	340.6	360.6	365.1	349.0	363.3
Electric Power and Gas Utilities		437.4	441.8	435.8	431.8	433.5	431.6	449.8	454.5	480.6	482.7	471.3	489.9	495.3
Primary Energy Demand (Annual Rate)	BKWH	42.86	43.46	42.52	42.14	43.06	42.59	43.67	44.51	44.98	46.11	45.50	46.71	46.88

ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED*

Domestic Exports	\$ Million	538.3	685.5	645.0	745.7	717.6	770.4	685.7	701.0	772.0	897.3	795.5		
Imports for Consumption	\$ Million	551.0	729.9	698.2	736.9	794.9	732.3	660.5	725.0	763.6	895.1	786.9		
Foreign Exchange Reserves	US \$ Million	2,649	2,554	2,567	2,499	2,480	2,492	2,598	2,614	2,644	2,681	2,665	2,548	2,510
Prices, Industrial Materials	1935-39=100	255.3	256.3	256.6	258.5	260.4	259.5	260.9	260.4	259.3	259.4	261.3	265.4	

ONTARIO ECONOMIC REVIEW

DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

OFFICE OF THE CHIEF ECONOMIST

H. Ian Macdonald, Chief Economist

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CONTENTS

The Ontario Economy	1
Progress Under the Automotive Free Trade Agreement: Some Comments, <i>Reed T. Cooper</i>	3
Indicators and Charts	7

The Ontario Economic Review is prepared and edited monthly in the Economic Analysis Branch of the Department of Economics and Development and is available free of charge. The review is intended to provide current information on economic activity in Ontario and to act as a forum for the results of research in the public service on matters affecting the Ontario economy. The signed articles reflect the opinions of their authors and do not necessarily represent the views of the Economic Analysis Branch. All correspondence should be directed to the Editor, Ontario Economic Review, Economic Analysis Branch, Department of Economics and Development, 950 Yonge Street, Toronto 5.

THE ONTARIO ECONOMY

Production

During May steel ingot production recovered from the less active month of April. Production rose from 845.2 thousand tons to 877.6 thousand tons, a gain of 3.8 per cent. However, the May figure did not quite equal the 1966 high of 879.2 thousand tons set in March.

The seasonally-adjusted Index of Industrial Production for Canada rose 0.8 per cent from February to March 1966, reaching a level of 272.9 (based on 1949 = 100). This represented an 8.9 per cent increase over the past 12 months.

Growth over the one-month period was recorded at 0.7 per cent in mining and manufacturing and at 2.4 per cent in electric power and gas utilities.

In mining the overall one-month gain was the net result of increases in the production of nickel (12.8 per cent), asbestos (8.2 per cent) and petroleum (2.1 per cent) in the face of very limited gains or actual declines in the other components. Iron ore and coal experienced the most noticeable declines, dropping 15.7 per cent and 6.9 per cent respectively.

In spite of slight declines in the motor vehicles industry and in iron and steel, manufacturing still recorded a net gain of 0.7 per cent. Non-durables rose 1.1 per cent with most categories increasing; but durables increased only 0.2 per cent. Over the 12-month period the gains for non-durables and durables were 8.9 per cent and 8.2 per cent respectively.

In electric power and gas utilities the 4.0 per cent increase in electric power over the one-month period countered the 4.8 per cent decline in gas production. On a one-year basis electric power has increased a substantial 17.0 per cent.

Ontario's manufacturing shipments rose to a level of \$1,489.2 million in February, an increase of 0.9 per cent from the previous month. Over a one-year period the increase has been 17.5 per cent.

Construction

Construction contracts awarded in Ontario were recorded at \$197.4 million during May, 9.4 per cent higher than May 1965. This increase was due to the substantial increase in business, institutional and engineering contracts which were 30.2 per cent, 27.9 per cent and 40.8 per cent higher respectively than a year ago. Their May values were recorded at \$25.2 million, \$41.0 million and \$26.6 million respectively. Residential construction, on the other hand, was valued at \$68.1 million, down 20.8 per cent from one year earlier. Both apartment and housing construction showed less activity than last May.

The following are some of the "Big Jobs" — those valued at \$1 million or more — which contributed to Ontario's "Big Job" total of \$78.9 million in May.

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ Million</i>	<i>Description</i>
Beaverton	1.2	Home for the aged
Burlington	1.0	Plant
Hamilton	1.2	Apartments
London	7.3	Hospital extension
North York Twp.	1.2	Plant and office
Orillia	2.5	Plant
Ottawa	7.2	University building
Peterborough	1.0	Apartments
Saltfleet Twp.	2.3	Apartments
Sarnia	1.8	Shopping centre
Scarborough Twp.	6.5	Mail order building
Toronto (metro)	15.3	Apartments
Windsor	8.0	Auto plant extension
Woodstock	2.8	Textile plant
Various locations	7.5	Provincial highway projects

For the first five months of this year, overall construction awards in Ontario have been running 10.4 per cent ahead of last year. As in the case of May, this has been attributable to generally higher levels of activity in most types of construction with the exception of residential construction.

Housing starts in April in Ontario centres of 5,000 population and over totalled 3,047 dwelling units, a drop of 14 per cent from April 1965. Metro Toronto (census area), accounting for 1,285 units, was down 14.9 per cent from last year.

Reduced residential construction in Ontario throughout 1966 is reflected in the fact that starts for the first four months, numbering 9,959, are running 2.3 per cent below last year.

With 4,875 units completed in April, the four-month total is now 17,059 dwelling units. This is 3.8 per cent below the 17,736 units completed in that period last year.

Retail Trade

Retail trade during the month of April experienced a very slight decline from April of the previous year. This was mainly due to the introduction on April 1st of an increase in the Ontario sales tax, a measure which had led to a greater concentration of sales in March. The retail sales — which in March had been 25.5 per cent higher than last year — were down in April 0.5 per cent from April 1965. The recorded value was \$644.9 million. Across the rest of Canada sales were approximately 7.3 per cent higher than last year.

The decline of April sales was particularly evident in the motor vehicles group. In March, Ontario motor vehicle dealers experienced sales of \$190.3 million, 41.1 per cent more than in March 1965; in April, on the other hand, sales were recorded at \$99.7 million, a drop of 27.2 per cent from that month one year earlier. Furniture, appliance and radio dealers also saw a great change in the growth of sales; in March they were running 42.0 per cent ahead, while in April they were down 6.8 per cent. Department and clothing stores also experienced slight declines in April sales compared with one year earlier.

In spite of the low April figures, Ontario's retail trade so far this year has continued to record a substantial increase over last year. During the first four months of 1966, sales were up 10.4 per cent. For the nation as a whole the increase was 9.2 per cent.

Consumer Prices

The Consumer Price Index, at 143.2 at the beginning of May (based on 1949 = 100), was 3.9 per cent higher than May 1965, according to the Dominion Bureau of Statistics. May prices reflected a 0.1 per cent increase from the previous month. The most pronounced increase — 1.0 per cent — came in the recreation and reading component, due to higher prices for theatre admissions, camera film, bicycles and toys. Health and personal care showed the next-highest increase. Higher prices for men's haircuts and women's hairdressing led to a 0.8 per cent increase. Food and housing, the two major components of the Index, increased to 143.8 and 144.2, gains of 0.1 per cent and 0.3 per cent respectively. Higher prices for automobiles, gasoline and train fares produced a 0.3 per cent increase in the transportation component. Tobacco and alcohol edged up 0.1 per cent. The clothing index was the only one to fall, declining 0.2 per cent from April to May.

On a regional basis, the indexes for Ottawa and Toronto increased a slight 0.1 per cent. Centres in the four western provinces all experienced greater increases. In Toronto, food and clothing declined, tobacco and alcohol held steady, and all other components rose. In Ottawa a similar pattern was observed as food and clothing declined and the other components rose.

Domestic and Foreign Investment

Ontario's views on investment were presented recently in an address by John P. Robarts, Prime Minister of Ontario.

Mr. Robarts pointed out that the achievement of two things necessary for adequate economic growth — increased capacity and rising productivity — depended to a significant degree on a high rate of investment. In Ontario, which accounts for over one-half of Canada's manufacturing shipments, manufacturing investment over the three-year period 1964-1966 has increased by 108 per cent. Still there is need for more business investment: we need a high level of investment, particularly in the automotive and related industries, and in industries producing construction materials.

The question of the desirability of foreign investment must be viewed within such a context. Has Canada provided sufficient investment funds out of its own savings? In 1965 it did not. That year national saving represented a relatively large proportion — 20 per cent — of GNP, yet private domes-

tic investment was an even larger 21.9 per cent. (In the United States, on the other hand, saving and private domestic investment represented 16.3 per cent and 15.6 per cent of GNP respectively.) As a result Canada was a net importer of capital, using the capital to finance the excess of investment over saving. Clearly this inflow helped to provide the healthy climate which produced such an impressive rate of economic growth last year.

It is often contended that foreign investment in Canada should be more in the form of debt instruments and portfolio investment rather than direct foreign investment. Yet in 1964 — the latest year for which information is available — more than 75 per cent of U.S. long-term capital flowing into Canada was for the purchase of debt or portfolio securities, not direct investment. In actual fact the flow of direct foreign investment has declined over the past several years. In 1960 it was valued at \$650 million;

in 1965 it was \$390 million — a reduction of 40 per cent. As a percentage of GNP it has declined from 1.7 per cent to 0.7 per cent.

A little-known fact is that, despite our small population, Canada's direct investment abroad in the past three years has amounted to 42 per cent of the direct investment flowing into this country.

Is foreign investment bad from an economic point of view? It is difficult to see how. In fact, it has provided for Canada high quality management, advanced technology and the results of research and development programs, and a chance to participate in a high-productivity modern economy. In addition foreign-owned manufacturing firms in Ontario have for the most part reinvested their savings to provide for their own expansion. As a result, they themselves have been very important contributors to both increasing capacity and raising productivity in Ontario.

PROGRESS UNDER THE AUTOMOTIVE FREE TRADE AGREEMENT: SOME COMMENTS

REED T. COOPER

Chief, Industrial Research Section, Trade and Industry Branch
Ontario Department of Economics and Development

INTRODUCTION

On January 18, 1965, the Automotive Free Trade Agreement between Canada and the United States was initiated. In Canada an Order-in-Council at that time made it immediately effective. In the United States the Senate ratified the Agreement on October 8, 1965, making it retroactive to January 18, 1965 as well.

Provisions of the Agreement

Under the terms of the Agreement the United States was permitted to import duty-free those motor vehicles and original equipment parts produced by Canadian motor vehicle manufacturers. Canada for its part permitted automotive producers in Canada — who qualify under the tariff provision — to import duty-free from all countries motor vehicles and parts used in their manufacture.

Duty-free entry to Canada was made available only to motor vehicle producers and to parts makers producing components on order from vehicle producers. Components for the replacement market were specifically excluded; in their case the existing tariffs still applied.

In order to qualify as a motor vehicle manufacturer under the new Agreement, a producer had to continue producing vehicles in Canada in the same ratio to his vehicle sales in Canada as he had achieved during the period August 1, 1963 to July 31, 1964.

The motor vehicle manufacturer was also required to maintain the proportion of Canadian value added⁽¹⁾ in his Canadian vehicle production at least equal to that attained during the same base period. In calculating the Canadian value added content, only those elements of cost which were actually expended for Canadian goods and services were to be included, both in the base year and in subsequent years.

Other Considerations

Behind the Agreement have been firm but private assurances by the Canadian subsidiaries of the parent United States motor vehicle producers that they would not only maintain their existing share of an expanding North American market, but by the

⁽¹⁾ Value added represents the value of the final vehicles less the cost of materials and fuel and electricity consumed in their production.

1968 model year — and each year thereafter — they would expand their total production from four per cent of the North American total to 7.5 per cent. It was estimated that by 1968 the value of the expansion in production of motor vehicles would be about \$260 million.

At the time of the announcement of the new Agreement, Canada's annual automotive trade deficit was in the neighbourhood of \$640 million, and its position was deteriorating rapidly. Canada was producing about four per cent of the North American automobile market but consuming about 7.5 per cent of it.

On June 28, 1965, the Government of Canada announced a two-part supplement to the Agreement as it applied to Canada. In the first part it agreed to provide loans at six per cent interest to help auto parts manufacturers expand production. This would enable them to meet the anticipated demand for parts resulting from the Agreement. In the second part it provided for assistance benefits to workers laid off temporarily because of plant reorganization. These benefits, including all unemployment benefits and government assistance, would range from 62 per cent to 75 per cent of the workers' straight-time pay.

The new Agreement was to be of unlimited duration, but contained a provision that the entire program would be reviewed in 1968.

RESULTS OF THE AGREEMENT SO FAR

With the Agreement now in effect for more than one and one-half years, it is possible to survey at least some of the changes in Canada's automotive industry accruing from it.

The following discussion deals with first the advantages and then disadvantages resulting from the Agreement.

Advantages

As a result of the Agreement, automotive production and sales have risen sharply. In 1965 Canadian automobile production increased 27.5 per cent over the previous year — establishing a new record. It also represented the fourth straight year of production increases. Exports of automotive products to the United States increased by 133 per cent, rising from \$99 million in 1964 to \$231 million in 1965. Automobile parts production in Canada in 1965 rose 21 per cent from the previous year.

In Ontario, over \$365 million of additional investment has been earmarked for new automotive plant

and equipment, giving rise to about 13,000 additional jobs. Details on a regional basis are provided in the accompanying table. At the end of 1965, construction and purchases valued at approximately \$154 million had commenced, and more than 8,000 additional jobs had been created.

One of the largest single items was the announcement by Ford Motor Company of its intention to construct a \$65 million automobile assembly plant at Talbotville. An estimated 1,000 construction workers will be employed in building the plant in the summer of 1966. It has also been estimated that, once completed, the impact of the employment and additional income generated in the area will result in an annual increase in retail sales of about \$50 million. The construction of a large pipeline from Lake Erie to supply water for the plant has also been initiated. Finally, when completed, the plant will require about 1,300 factory workers and 200 office workers from the surrounding area, chiefly from London and St. Thomas.

Under the terms of the Agreement, an additional 3.5 per cent of total North American automobile production is to be undertaken in Canada. The proposed new plant at Talbotville is a clear indication that productive capacity is indeed being increased to meet this objective. There have also been other additions to plant capacity by the "Big Three" auto manufacturers. These include a \$12 million project by Chrysler, expanding its passenger car and truck facilities in Windsor; Ford's \$50 million re-tooling, realignment, and modernization of engine and foundry plants at Windsor, and its new \$25 million truck plant at Oakville; and General Motors' new \$20 million trim plant in Windsor.

The Agreement has also given a new dimension to the Canadian automotive parts industry. For the first time in Canadian automotive history, plants are being constructed to produce automobile frames. This has been initiated by the Budd Automotive Company of Canada which has already started the construction of an estimated \$20 million plant in Kitchener. Hayes Steel Products Limited has also announced its intention to construct a similar plant in Thorold. The Thorold and Kitchener plants will not only increase the domestic demand for steel but will help to replace some of the large import items that contributed to the imbalance of trade in automotive parts between Canada and the United States. The Budd Company will initially produce about 500,000 frames a year and employ 750 workers. Hayes Steel is expected to turn out about 300,000 frames a year, employing an additional 450 workers.

AUTOMOTIVE INVESTMENT IN ONTARIO, STARTED AND ANNOUNCED⁽¹⁾,
SINCE THE COMMENCEMENT

of the
AUTOMOTIVE FREE TRADE AGREEMENT ON JANUARY 18, 1965

<i>Economic Region</i>	<i>Number of Major Investments</i>	<i>Employment Created⁽²⁾</i>	<i>Capital Investment⁽³⁾</i>	<i>Percentage of Investment</i>
	<i>No.</i>	<i>No. of Jobs</i>	<i>\$</i>	<i>%</i>
Eastern	1	32	—	—
Lake Ontario	6	510	5,650,000	1.6
Metropolitan	31	2,595	67,256,500	18.4
Niagara	25	1,623	25,988,677	7.1
Lake Erie	13	1,825	80,074,000	21.9
Lake St. Clair	53	4,940	146,820,855	40.2
Mid-Western	15	833	31,835,683	8.7
Georgian Bay	8	803	7,775,000	2.1
Northeastern	—	—	—	—
Lakehead-Northwestern	1	—	—	—
TOTAL	153	13,161	365,400,715	100.0

⁽¹⁾ As of April, 1966.

⁽²⁾ Employment figures cover only 72 out of 153 companies.

⁽³⁾ Capital investment figures cover only 118 out of 153 companies.

Source: Trade and Industry Branch,
Department of Economics and Development.

Another result of the new Agreement has been a trend to concentration on front end parts production in Canada. This is illustrated by both Chrysler's and American Motors' intentions to expand their facilities to produce engines in Canada, and Ford's complete modernization of its plant at Windsor. McKinnon Industries in St. Catharines, a prime supplier for General Motors, has also expanded its facilities.

Yet another effect of the new Agreement has been the expansion of trim facilities in Canada. Allan Industries Canada Limited is constructing a large trim plant near Hamilton, and, as already mentioned, General Motors is building a trim plant in Windsor.

The indirect effects of the new Agreement have also been substantial. There have been announcements of additional plant capacity — to supply the increased automotive demand — by industries producing steel, plastics, rubber, textiles and glass. Both the Algoma Steel Corporation Limited of Sault Ste. Marie and the Steel Company of Canada in Hamilton and Toronto have announced huge plant expansions, made necessary by increased automobile production in Canada. Multi-million dollar additions to capacity have also been undertaken or announced by the Dominion Rubber Com-

pany of Canada Limited in Kitchener, and the Goodyear Tire and Rubber Company Limited in Collingwood and Chatham. Both Polymer Corporation Limited of Sarnia and Canadian Industries Limited have also announced huge expansions in their plastics division as a result of the new Automotive Free Trade Agreement. Finally, Pilkington Brothers plans a large expansion project in its plate glass operations to help meet the increased demand from the automotive industry.

Disadvantages

One of the chief disadvantages of the Automotive Free Trade Agreement between Canada and the United States is the precarious position in which some Canadian automobile parts producers have been placed. The fear is that large parts makers in the United States or their branch plants in Canada will take away most of the business enjoyed by Canadian independents. The Canadian firms are no longer protected by tariffs and the motor vehicle manufacturers have announced that they will arrange for contracts on a competitive basis only. This difficulty has been augmented by the fact that the purchasing departments of the "Big Three" are now located primarily in Detroit.

Despite the recent removal of the 11 per cent federal sales tax on tools, dies, jigs, and fixtures — used to produce cars and car parts — the major purchases of capital equipment to be used in the industry will not benefit until April 1, 1967, when the tax will be cut to six per cent. The tax will be eliminated completely one year later on April 1, 1968. Yet during the next two years, when Canadian parts manufacturers attempt to expand their production facilities, this tax on machinery purchases will continue to leave Canadian producers at a disadvantage compared to their United States counterparts who do not pay such a tax. One of the intentions of the new Agreement is to provide equality of opportunity between Canadian parts manufacturers and their counterparts in the United States. To a certain extent the disparity is offset by a 7.5 per cent discount on the Canadian dollar in terms of United States currency. However, it has been calculated that despite the lower average wage rates in the industry and the dollar discount, average costs for the Canadian firms are about 15 per cent higher than they are in the United States.

Although the United Auto Workers' contracts with the automotive companies are not scheduled for renewal until 1967, the union has stated it will demand that workers in Canada receive wage parity with their fellow workers in the United States. If this occurs before costs in Canada are reduced for all other aspects of automotive production, then the Canadian plants will be at a further disadvantage. However, the U.A.W. has stated that it will tie-in its demand for wage parity with productivity in the industry.

Imports of automotive products have continued to expand, but because of the greater flow of exports, the expansion in the trade deficit of these products is somewhat less than it would otherwise have been. For 1965 the imbalance in motor vehicle trade was \$799 million. Also, for every passenger car imported from the United States at the present time, one Canadian passenger car is now exported.

It is feared that, due to the continental re-organization taking place, the small parts firms will lose business to their already more-efficient U.S. counterparts. (Prior to the new Agreement the higher premium prices charged by the Canadian firms were acceptable because of the tariff wall and Canadian content requirements. This permitted the continued existence of many small firms.) To a certain extent these fears have been allayed, because under the terms of the new Agreement Canadian auto manufacturers must maintain a Canadian value added in their Canadian vehicle production at

least equal to that attained in the base year. This amounts to roughly 60 per cent of total production. It is therefore assured that some Canadian parts will be purchased in Canada.

So far Canadian parts producers have not fared badly. According to industry sources, most parts producers have enough orders to carry them through the 1967 model year. It is also worth remembering that Canadian parts production expanded by 21 per cent from 1964 to 1965.

It was understood that motor vehicle manufacturers would begin to order parts under the new re-organization commencing with the 1967 model year, but it now appears that the more severe adjustment will not take place until contracts are drawn up for the 1968 model year — in the spring of 1967. Certain features have, however, come to light. Some of the small operations have reported that their usual contracts were not renewed this year. How much the withdrawal of these contracts will affect overall production remains to be seen. Talks with companies that have already lost orders have revealed that although they lost single contracts, they retained others. In some cases this was expected. To compensate for losses, several firms have sought additional orders outside the automotive industry.

It is also feared that a large part of the Canadian content commitments will be fulfilled by expanded automobile manufacturing in Canada and by the production of high-dollar-value parts, such as frames and engines. Many of the smaller parts will then be imported duty free from the more efficient United States plants.

Prices

The final objective of the new Automotive Free Trade Agreement is that there should be a progressive narrowing of the price differentials between comparable Canadian and U.S. model cars, resulting from the cost savings of longer production runs. Some improvement has already taken place.

The most meaningful comparison is between factory wholesale prices in Canada and the United States, net of all federal and provincial or state taxes, transportation costs, and adjusted for the exchange rate. For the 1965 model year, the average difference in prices between popular Canadian and U.S. cars was somewhat less than \$150, or eight per cent. For the 1966 model year the difference ranged between three per cent and five per cent.

As the objectives of the Agreement are progressively achieved and production is organized on a continental basis, we should expect a further narrowing of the price differentials.

ONTARIO ECONOMIC INDICATORS - SEASONALLY ADJUSTED

(* Figures for Canada)

LEADING INDICATORS	1965 - - - - - 1966 - - - - -											
	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
Average Weekly Hours Worked in Manufacturing	41.5	41.0	41.3	40.8	40.9	40.7	41.1	41.4	42.2	5,805	5,061	4,634
New Dwelling Unit Starts	3,848	5,010	5,806	4,770	7,377	4,464	3,764	4,708	4,634	72	76	91
Business Failures	67	87	65	63	83	79	70	71	69	4.9	7.3	5.1
Business Failures - Liabilities	4.0	5.3	4.6	4.0	20.7	9.5	2.6	3.4	3.2	2,996	3,123	3,141
New Orders in Manufacturing*	2,827	2,834	2,829	2,849	2,909	2,897	3,005	3,014	3,103	46.4	46.4	79.6
Housing Contracts	67.3	53.7	70.9	76.2	59.1	44.3	56.6	68.9	51.9	101.8	162.8	218.2
Business, Industrial and Engineering Contracts	109.3	117.9	135.9	127.8	115.0	155.7	98.1	87.6	125.8	19,758	19,814	19,993
Money Supply*	18,557	18,683	18,716	19,172	19,639	19,654	19,786	19,747	19,770	171.2	169.8	167.1
T.S.E. Index - 77 Stocks	171.1	169.5	163.0	163.9	166.8	171.4	174.2	167.7	168.1	20,184	20,184	164.9
COINCIDENTAL AND LAGGING INDICATORS												
New Dwelling Unit Completions	7,115	4,518	4,019	2,153	4,075	3,269	2,830	3,825	4,570	5,553	4,382	5,230
Average Hourly Earnings in Manufacturing	2.23	2.22	2.23	2.23	2.23	2.26	2.28	2.29	2.26			
Gross National Product*	-	-	-	-	-	-	-	-	-	-	-	-
Cheques Cashied in Clearing	-	-	-	-	-	-	-	-	-	-	-	-
Centres	-	-	-	-	-	-	-	-	-	-	-	-
Retail Trade	4,127	4,211	4,097	4,184	4,634	4,287	4,313	4,363	4,526	4,687	4,476	4,518
Labour Force	659	672	665	672	669	667	694	703	697	695	715	780
Employed	2,594	2,607	2,626	2,626	2,642	2,608	2,605	2,621	2,641	2,675	2,672	2,686
Unemployed	2,522	2,536	2,548	2,556	2,574	2,541	2,556	2,562	2,582	2,612	2,612	2,629
Unemployed as % of Labour Force	72	71	78	72	68	67	49	59	59	63	60	57
Wages and Salaries	2.8	2.7	3.0	2.7	2.6	2.6	1.9	2.3	2.2	2.4	2.2	2.1
Industrial Employment	849	854	861	868	874	888	895	908	917	924	936	
Total Industrial Production*	139.8	140.1	140.5	140.7	140.9	142.5	143.3	144.8	145.7			
Total Manufacturing	248.8	250.3	251.6	254.9	258.2	260.2	261.6	264.0	268.6	268.9	271.5	274.0
Non-Durables	224.1	227.3	228.1	231.3	232.8	233.7	237.1	237.6	242.5	243.3	244.6	247.0
Durables	217.7	222.2	221.0	225.2	226.3	227.1	230.2	229.1	234.7	235.5	236.8	240.2
Mining	231.6	233.2	236.3	238.5	240.4	241.5	245.0	247.5	251.6	252.5	253.7	255.0
Electric Power and Gas Utilities	361.4	350.3	355.4	360.7	373.9	383.7	362.2	377.8	385.0	372.7	387.1	390.4
Primary Energy Demand (Annual Rate)	437.1	434.9	437.6	438.8	451.5	456.0	471.2	478.0	471.6	488.9	490.7	492.7
BEWH	42.52	42.14	43.06	42.59	43.67	44.51	44.98	46.11	45.50	46.71	46.60	46.86
ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED*												
Domestic Exports	645.0	745.7	717.6	770.4	685.7	701.0	772.0	897.1	795.5	722.9	674.5	768.7
Imports for Consumption	698.2	736.9	794.7	732.3	660.5	724.7	763.6	895.3	786.9	703.9	660.9	825.1
Foreign Exchange Reserves	2,567	2,499	2,480	2,492	2,598	2,614	2,644	2,661	2,665	2,562	2,548	2,510
Prices, Industrial Materials	256.6	258.5	260.4	259.5	260.9	260.4	259.3	259.4	261.3	265.4	267.9	264.6
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US \$ Million

1935=100

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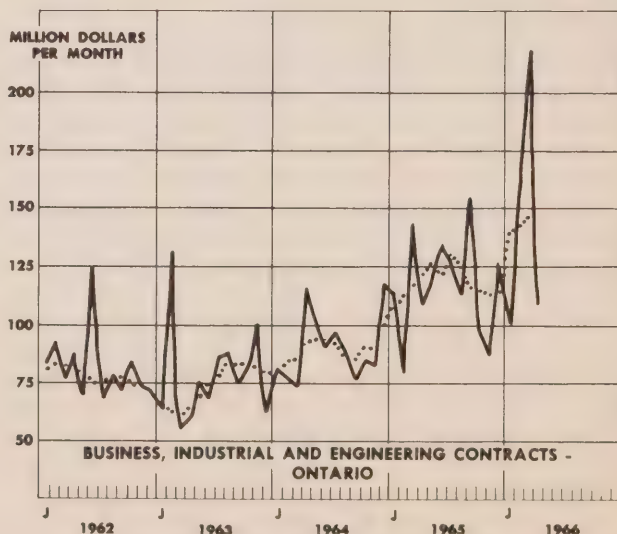
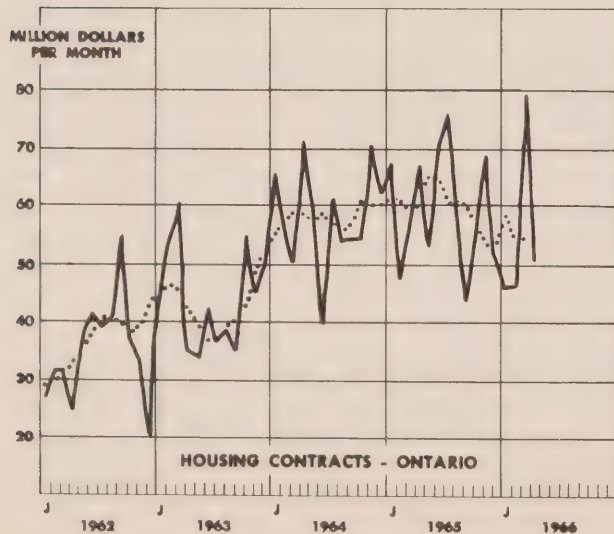
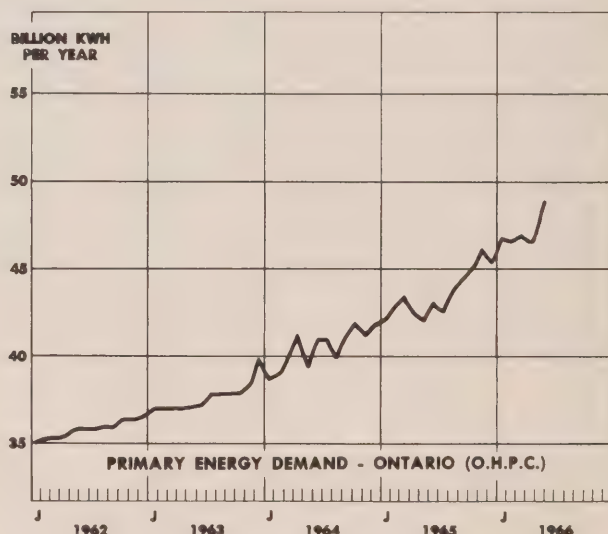
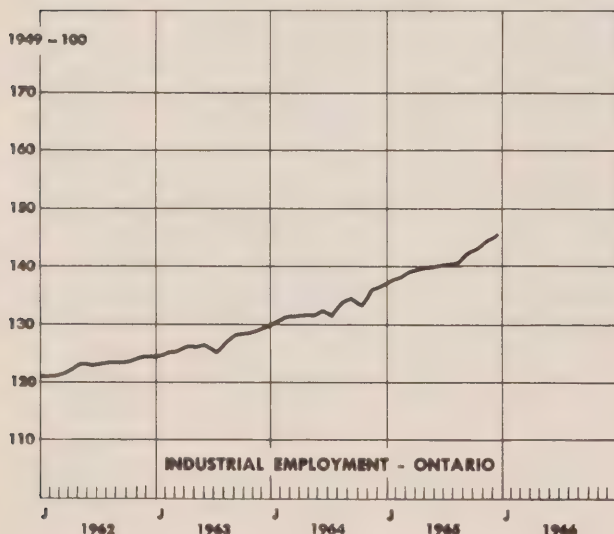
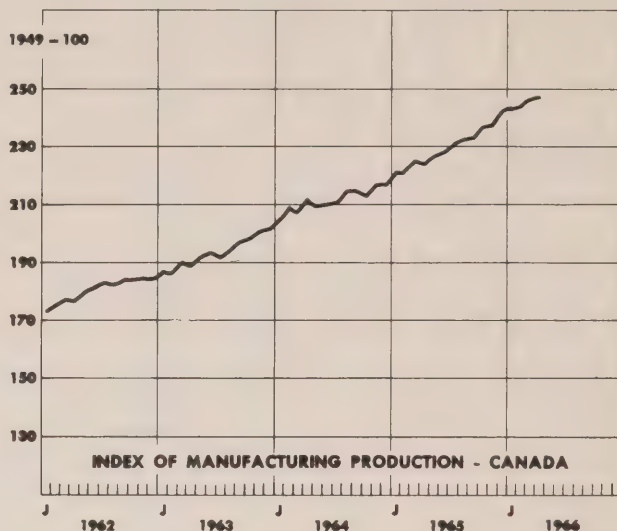
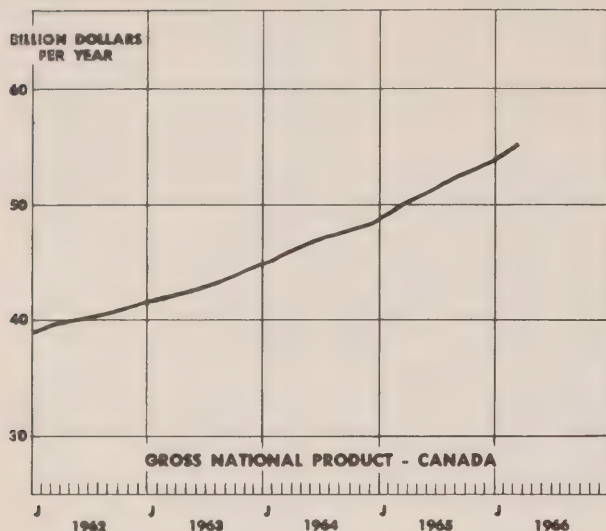
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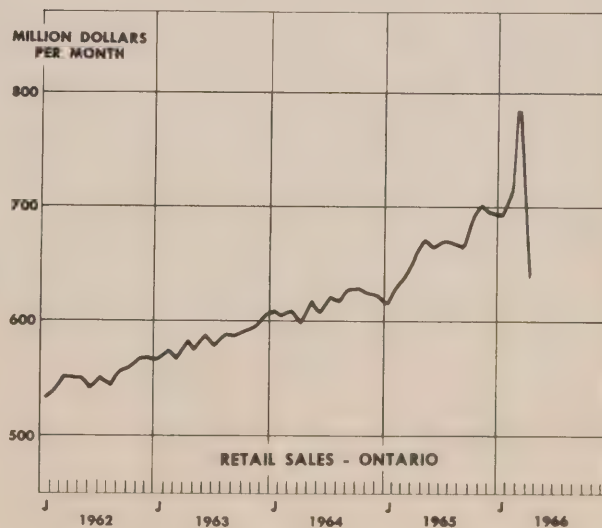
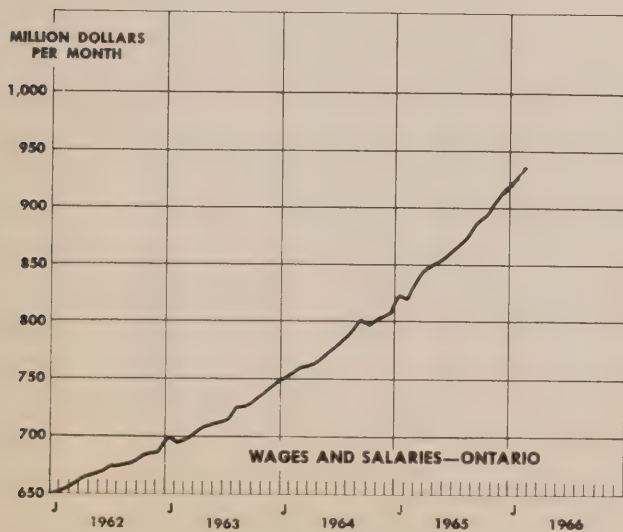
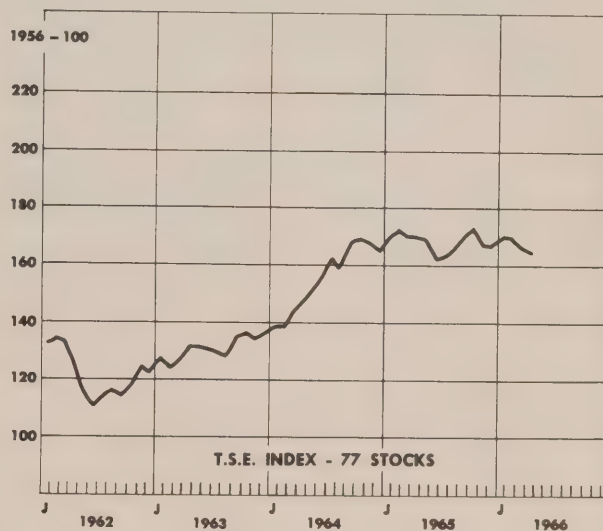
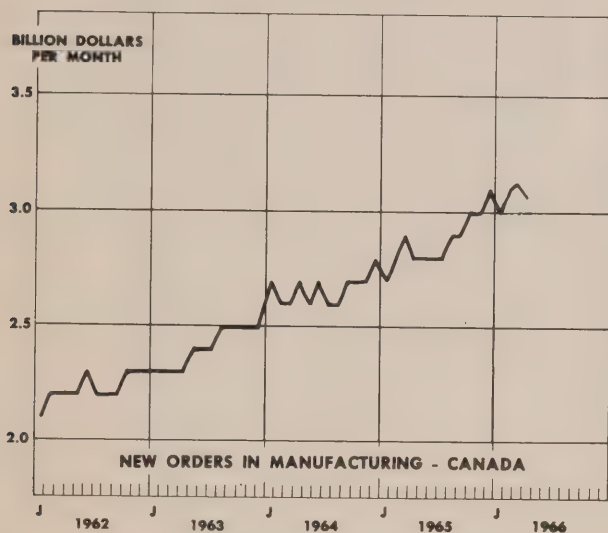
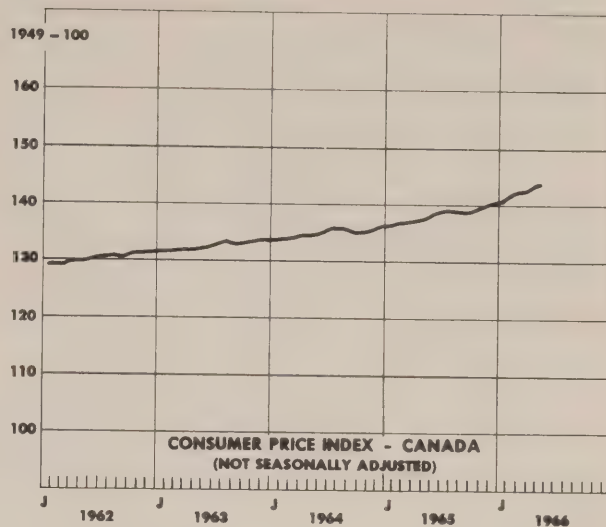
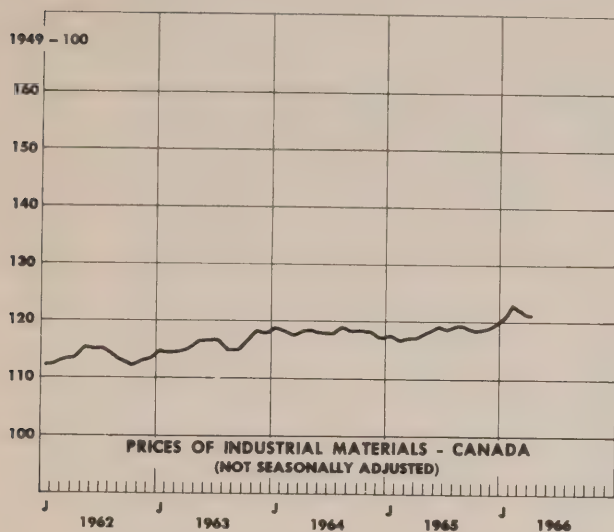
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



..... TREND CYCLE

———— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



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ONTARIO ECONOMIC REVIEW



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DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

OFFICE OF THE CHIEF ECONOMIST

H. Ian Macdonald, Chief Economist

CONTENTS

The Ontario Economy	1
Ontario's New Housing Program, <i>P. E. H. Brady</i>	5
Indicators and Charts	10

THE ONTARIO ECONOMY

The very rapid pace of economic activity in Ontario and the nation as a whole eased in the second quarter of 1966. The more moderate growth rate was achieved principally through the further tightening of credit conditions, easing slightly the pressures on available resources. As a result, production — though still well ahead of last year — began to level off, with the Index of Industrial Production rising 0.4 per cent from April to May. In construction, where growth has been particularly strong in recent years, the impact of tighter credit conditions has been most apparent. Residential construction contracts — particularly for apartments buildings — have been down for some months now, while business, industrial and engineering contracts have dropped sharply in the past few months.

The moderating effect was also felt in retail trade with April and May sales dropping off sharply from the record month of March.

The employment situation in Ontario remained good in June. The number of people employed was recorded at 2,651 thousand, seasonally adjusted, reflecting an unemployment rate of 2.9 per cent.

Production

Production of steel ingots, unadjusted for seasonal variations, was recorded at 855.0 thousand tons in June, an increase of 2.9 per cent over June 1965. However, when the first six months of 1966 and 1965 are compared, the 1966 value of 5,127.8 thousand tons reflects a larger gain of 5.4 per cent.

Canada's seasonally adjusted Index of Industrial Production (based on 1949 = 100) rose a slight 0.4 per cent from April to May, reaching a level of 275.6. The restraint on growth was largely due to a decline of 0.7 per cent in durable goods manufacturing and only a marginal increase of 0.2 per cent in non-durables production. Mining and electric power and gas utilities both increased more rapidly, rising 1.3 per cent and 4.6 per cent respectively over the one month period.

The decline in durables was triggered by lower automobile sales in Canada and the United States. As a result motor vehicle production dropped 7.7 per cent from April to May as inventories built up. The entire transportation equipment component of durable goods fell almost four per cent below the April level. There was also a decline of 1.6 per cent in the iron and steel products category, attributable to the 5.1 per cent decline in primary iron and steel production. This decline was partly in response to new appraisals of long-run automotive requirements and partly due to the more moderate growth of construction industry requirements.

In spite of the relatively small increase in the Index from April to May, the May level was still 10.1 per cent higher than May of last year. Total manufacturing was 8.7 per cent ahead with durables and non-durables ahead 8.9 per cent and 8.6 per cent respectively. Mining was up 13.8 per cent and electric power and gas utilities 16.7 per cent.

Ontario's manufacturing shipments in May were valued at \$1,648.7 million, 6.7 per cent ahead of last May's \$1,545.3 million. The increase was due mainly to gains in paper and allied industries, primary metals, metal fabricating and electrical products. The 1966 value for the January to May period was \$7,952.4 million, a gain of 11.2 per cent over the comparable period last year.

Construction

Construction contract awards in Ontario during the month of June were down rather markedly from last June, according to the *Southam Building Guide*. Total awards, unadjusted for seasonal variations, were valued at \$179.4 million, a decline of \$85.8 million or 32.3 per cent.

All types of construction were down from last year, mainly because of tightened credit conditions. Most noticeable was the reduction in residential construction, down from \$95.5 million last June to \$55.7 million this June. Most of the decline was accounted

for by the reduced value of apartment construction awards.

Actual housing starts during June in Ontario centres of 5,000 population and over were down 34.5 per cent from last June. Starts numbered 5,048 compared with 7,705 last June. In Metropolitan Toronto (census area), which accounts for about half of the starts in the province, they were down almost 40 per cent to a level of 2,698. Completions across Ontario numbered 5,843, while the number of dwelling units under construction at June 30th was 47,420 compared to 43,271 a year earlier.

"Big Jobs" in Ontario — contract awards of \$1.0 million or more — were valued at \$65.5 million in June. The following table gives the nature and location of many of the awards:

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ Million</i>	<i>Description</i>
Ajax	2.6	Plant addition
Amherstburg	1.5	High school addition
Barrie	2.5	High school
Burlington	2.0	Plant
Collingwood	5.6	Yarn plant and tufting mill
Cornwall	4.5	Methanol chemical plant
Espanola	1.2	High school addition
Exeter	2.5	High school addition
Hagersville	1.3	High school
Hamilton	2.3	Hospital addition
Hamilton	3.0	Plant addition
New Toronto	7.0	Rolling mill addition
Niagara Falls	1.7	High school
Oakville	1.0	Apartments
Oshawa	1.5	Plant addition
St. Thomas	2.0	Factory addition
Sudbury	1.0	School addition
Toronto	4.4	Trunk drain and storm sewer
Toronto (metro)	4.5	Housing and apartments
Yarmouth Twp.	75.0	Auto assembly plant (initial work)

Source: Southam Building Guide.

The 1966 six-month total for construction activity also reflects the easing of building and the slight moderation of pressures in the construction industry. Construction contract awards, at \$1,046.6 million, were down 0.4 per cent from last year, while the number of housing starts in the province was 15 per cent below last year. However, the six-month total

for dwelling unit completions this year, at 26,435, was running about 1,500 ahead of the comparable 1965 period.

Retail Trade

Ontario's retail sales in May, not adjusted for seasonal variations, rose a slight 3.1 per cent from the relatively inactive month of April. Sales were recorded at \$685.5 million. Compared with May 1965 retail trade has declined by 4.0 per cent. The slump in motor vehicle sales — down 19.9 per cent from last May — has been an influential factor. Foremost among the reasons for the slump in automobile sales have been tighter credit conditions and a saturated used car market — the result of heavy automobile purchases during the past few years.

Sales of food, department and clothing stores have generally declined from last year as well. Only drug, jewellery and variety stores showed impressive gains of between five and eight per cent.

In spite of generally low sales in April and May, total retail sales for the first five months of 1966 reflect a substantial increase over the same period last year. In the January-May period sales were \$3,318.9 million, 7.1 per cent higher than in 1965. All categories were higher, with building materials, hardware and furniture showing increases in excess of 10 per cent. Motor vehicle sales — so active in the first three months of 1966 — have risen only 2.4 per cent in a comparison of five-month figures.

Finance

Noticeably higher interest rates — associated with increasing credit restraints — prevailed throughout the first half of 1966. Consequently, as the demand for funds has built up through postponement of borrowing, there has developed a general reluctance to commit short-term funds. The day-to-day loan rate has fluctuated within close proximity to the rediscount rate. This in turn has forced many dealers to resort to the Bank of Canada to meet many of their daily obligations. Tight credit conditions have led a number of finance companies to raise the interest rate they are prepared to pay on 90-day money to 6½ per cent and to 6¼ per cent for 90-day to one-year notes.

The market for new bond financing clearly reflects the degree to which borrowing has been postponed. New issues totalled only \$2,064.1 million in the first half of 1966, compared with \$2,154.3 million for the corresponding period in 1965. An increase in borrowing by provinces, municipalities and corporations was more than offset by a decline in federal financ-

ing. The prevailing high level of interest rates has discouraged borrowers, while a shortage of funds in the market has made it difficult to place new offerings.

Prices of outstanding issues in all sectors of the Canadian bond market have now ebbed to about the lowest level ever reached. For instance, the Government of Canada 4½ per cent 1983 bond issue was recently quoted at an \$86 bid, a loss of some \$3.00 or 3.4 per cent since the beginning of 1966.

Prices of quality industrial equities, along with those of lower quality in related industrial sectors, displayed a decided degree of uncertainty in the first half of the year. However, while prices have generally tended to decline, the market's range of fluctuations and the value of losses have been less than in New York. At the end of June, the Toronto Stock Exchange Industrial Index had fallen to a level of 161.97, a decline of some 6.59 points or 3.9 per cent since the beginning of the year. It is increasingly apparent that high interest rates have diverted considerable amounts of money from the equity market to bonds and other debt obligations. A number of institutions such as mutual funds have temporized in order to build up their cash positions in anticipation of opportunities to acquire equities at lower prices.

Canada's foreign exchange reserves (official holdings of gold and U.S. dollars) were valued at some US\$2,341.8 million at the end of June, largely because of a series of transactions in which Canada repurchased over \$140 million of U.S. held Canadian bonds. This represented a reduction of \$322.7 million since the end of 1965. It was necessitated by the United States-Canada agreement that obliges Canada to keep these reserves — including IMF credits — below a \$2.6 billion total, in exchange for an exemption from a number of specific United States guidelines and restrictions on the outflow of U.S. funds. Thus, at a total reserve position of US \$2,595.1 million, Canada has for the first time managed to bring its reserve position below the stipulated maximum.

The value of the Canadian dollar has held steady with fluctuations confined within a very narrow range — despite Canada's relative inaccessibility to international capital funds so far this year. New sizeable wheat contracts with Russia can be expected to support our reserve position and the strength of the Canadian dollar during the rest of this year. In terms of U.S. funds, the present quoted value of the Canadian dollar at 92.98 cents is less than 0.02 cents below its value at the close of 1965.

Ontario Agricultural Review and Outlook*

(i) Review of 1965

The physical volume of Ontario's agricultural production reached a new record in 1965, surpassing the record year 1964 by four per cent. Combined with a substantial increase in the price index for farm products — an increase which took that index to the highest level since 1951 — the gross value of agricultural production reached \$1,515.1 million, 8.5 per cent more than the previous year.

Operating and depreciation charges rose four per cent last year — a lower rate than in previous years. Prices of commodities and services purchased by farm operators went up 3.9 per cent, with the largest increases in the prices paid for hired labour, building materials and fertilizer. Consequently total net income from agricultural production rose to \$412 million, 16.2 per cent more than in 1964.

The area under field crops last year remained substantially unchanged at 7.7 million acres. While serious winterkill affected winter wheat, reducing both acreage and yield, acreage in spring gains rose, with yields higher than average. Acreage of soybeans, corn and white beans also increased. High tobacco acreage — the largest in several years — resulted in a farm value of just over \$100 million. Total farm value of all field crops was \$553 million, about \$42 million more than in 1964. Forage supplies were reduced quite seriously in 1965, particularly in Eastern Ontario, where severe drought conditions reduced yields and poor harvesting weather deteriorated quality.

Livestock was the most active sector of the agricultural industry, with prices of virtually all meats increasing (mainly in response to prices in the United States). Although the number of cattle graded in Ontario was up 14 per cent from 1964, prices averaged about \$1.50 more. Hog slaughterings declined six per cent, and prices increased eight dollars per hundredweight.

During 1965, production of broilers rose five per cent, turkey production almost 10 per cent. The generally strong market for red meats kept up prices for both poultry meats, raising total value from \$71 million to \$78 million. In eggs the extremely low prices at the beginning of 1965 resulted in a drastic production cut-back during the latter half of the year. As a result production for the year was off by about four per cent, prices strengthened, and the farm value of egg production rose from \$53 million to \$57 million.

**Prepared by the Farm Economics, Co-operatives and Statistics Branch, Ontario Department of Agriculture and Food.*

Milk production rose only 1.5 per cent in 1965 — less than the population increase — to 6.9 billion pounds. With average milk prices increasing 10 cents to \$3.47 per hundredweight, the farm value of milk production rose \$10 million to \$239 million. Sales to dairies, at \$111 million, were up slightly, while milk sales for butter production were down. Butter production in Canada during the last two years has been below domestic disappearance, resulting in the gradual elimination of surplus butter stocks. Cheese production continued its upward trend, stimulated by the consistent demand for cheddar, both at home and in the United Kingdom, our main export market. Despite the 10 per cent increase in production, prices remained relatively favourable.

The farm value of fruit produced in Ontario fell 11 per cent in 1965, declining from \$32 million to \$29 million. Production of practically all fruits with the exception of grapes was lower. Fruit for processing remained unchanged, with reduced sales of certain fruits offset by higher negotiated prices. In spite of heavy grape production, the need to export the surplus at very low prices led to an overall decline in its recorded farm value.

In contrast to the reduced production of fruit, production of all main vegetables was higher in 1965 than 1964. Somewhat larger sales and higher negotiated minimum prices for several vegetables increased their farm value, but this was countered by a lower farm value of carrots and onions. The lower value for carrots and onions reflected the damaging effect on prices of increased production. Total farm value of vegetable production, at \$49 million, was practically unchanged from the previous year.

(ii) Outlook

Exceptionally hot and dry weather in mid-summer has had a harmful effect on spring grains this year, and yields have suffered as a result. These adverse conditions were particularly prominent in Southern and Western Ontario, although it was widespread

throughout the province. Yet in spite of this conditions are generally favourable for other field crops. The outlook for tobacco is particularly favourable this year. The 128,000 acres planted are expected to yield 220 million pounds — an all-time record.

In livestock, it is expected that the high prices producers have been receiving will continue through to late 1966. This is particularly true for hogs, due to the continuing shortage in the United States. Fed cattle marketings are expected to increase again this year but in view of the situation in the United States, prices are likely to average slightly higher than in 1965.

The heavy demand for meats should keep the price of chicken broilers relatively strong. This will be reinforced by an anticipated reduction in production late in the summer. Turkey broiler production should increase again this year, but prices are not expected to decline below the level of last year.

So far this year sales of milk to dairies have been only marginally higher than in the comparable period last year. Yet it is expected that the sizeable price increases for both fluid and secondary milk that are materializing this year will raise the value of milk purchases by dairies from \$111 million to \$125 million. Sales of milk for manufacturing are up slightly this year, while butter production has not changed. Cheddar cheese output is up three per cent. Other processed milk products are slightly lower according to statistics for the first six months of 1966.

Production of fruit crops in the province promises to exceed the relatively low production levels of last year. Peaches, pears and sweet cherries should be considerably higher with apples increasing moderately as well. However raspberries and sour cherries will be down sharply. Grapes, strawberries, plums and prunes will be moderately lower than last year. The condition of vegetable crops appears to be slightly below average, the result of insufficient rainfall throughout Ontario. Peas and head-lettuce have been particularly hard hit.

ONTARIO'S NEW HOUSING PROGRAM

P. E. H. BRADY

Deputy Managing Director (Development)

Ontario Housing Corporation

It has been said that a nation can be judged by the way in which it looks after its people, both young and old. Invariably the aims are similar but the means and the extent of assistance differ from place to place. Today most developed western nations have "anti-poverty" programs of one kind or another. In Canada there are various measures both at the federal and provincial levels, each with the objectives of creating opportunities and stimulating employment. Housing legislation is one such measure affording people the opportunity of establishing in, and becoming part of the urban communities of Ontario.

In Ontario the Ontario Housing Corporation, created in 1964, has been responsible for undertaking housing projects with these objectives in mind.

A new technique of aiding public housing projects was contained in the 1964 amendments to the National Housing Act, providing federal government loans to provinces or their designates for the purpose of building or acquiring housing to assist lower income persons. The loans amount to 90 per cent of project costs amortized over a 50-year period and bear an interest rate consistent with the costs of long term borrowings by the federal government. In the case of Ontario, the 10 per cent equity is supplied by the province through its housing agency. Operating losses for family housing developments are distributed among the three levels of government with the federal government assuming 50 per cent, the provincial government 42½ per cent, and the municipal government 7½ per cent of the losses. The federal and provincial governments share equally the operating losses sustained in senior citizen projects, with the municipality contributing by way of a tax subsidy waiving all realty taxes in excess of \$25 per year per unit. Municipalities receive full taxes for family housing projects.

Size of the Program

After eighteen months in operation the Ontario Housing Corporation has underway a larger housing program for low income families than that achieved by all of Canada during the period 1949 to 1964. The Corporation has built and acquired, and has under various stages of planning, some 13,000 units. This is 3,000 in excess of the Canadian total production during the 15-year period ended December, 1964. A program of this magnitude — particularly when considered in relation to the program in Canada prior to 1964 — reflects several things:

Determination by government to get on with the job of housing the poor and needy.

A bold new approach in terms of new techniques, together with a resolution to discard previously used methods not attuned to current housing market practices.

Determination to use the private building industry and real estate fraternity to do the job.

Determination to use every flexible tool and to time the market for the most advantageous techniques — sometimes building, sometimes buying, sometimes contracting.

Acceptance that urban renewal and housing are significant fields in any provincial work and opportunity program.

Determination to blend provincial and national housing legislation to achieve optimum results.

Determination to build and acquire to meet the needs of a community rather than to just meet regulatory requirements.

Acceptance that housing low income people is part and parcel of the larger private and public concern to house all economic groups within the community.

Willingness to experiment with new forms of housing and densities.

Basic appreciation that housing in itself is not the cure-all but simply an important part of the overall needs of man.

ONTARIO HOUSING CORPORATION AND ITS DEVELOPMENT TECHNIQUES

The Ontario Housing Corporation, set up on November 1st, 1964, is a crown corporation responsible to the Minister of Economics and Development and operates under the provisions of the Housing Development Act. More precisely, the reasons and purposes for the establishment of the Corporation can be summarized as follows:

(a) To reduce the multiplicity of agencies sharing responsibility for the planning, provision and administration of public housing in the province, and to achieve the advantages inherent in consolidating the control and co-ordination of various aspects of the Ontario public housing program.

(b) To increase substantially the portfolio of Ontario Public Rental Units and to shorten significantly the timing cycle requirement to complete the consecutive phases of housing development.

(c) To evolve and administer a system of sociological and technological research relative to housing needs and the construction techniques throughout the province.

(d) To undertake specifically designated real estate transactions on behalf of the government of the Province of Ontario.

(e) To provide to private individuals an effective stimulus and requisite resources for the renovation of older downtown residential areas.

(f) To motivate public housing tenants to aspire to ultimate homeownership.

(g) To de-emphasize the segregation of public housing families and encourage assimilation of tenants into the mainstream of the community wherever practicable.

(h) To counteract any stigma, rightly or wrongly associated with public housing operations, and to improve the general image thereof.

(i) To promote the Ontario public housing program with clarity, imagination, vigour and tangible performance so as to achieve acceptance from the public in general and response from the municipalities and needy citizens in particular.

The Corporation was determined at its inception to employ every available technique which would produce quickly and at reasonable prices the housing units requested by some 75 municipalities in Ontario. One important new technique was developed making use of the talents, energy and know-how of the private building industry. The traditional method of providing public housing by requesting tenders from builders based on given plans and specifications was supplemented by a new approach involving "builder proposals" and the purchase of existing properties.

Proposals from Merchant Builders, Developers and Owners

During 1965, builders, developers and owners were invited to make submissions to the Corporation for the provision of housing based on very specific building standards and bedroom count requirements. (These proposals could relate to units to be constructed, units under construction or completed real estate.) A basic requirement was that housing units had to meet the standards set out in the National Building Code or that of the municipality concerned, whichever was higher. This method proved to be very successful with respect to quality of design, layout, price and speed of delivery. There was some concern at the beginning that design and general layout would suffer in the proposals coming from private merchant builders. However this proved to be unfounded. This technique has provided some of the best designs and best layouts of developments owned by the Corporation.

In purchasing completed and occupied units the Corporation was faced with an additional consideration. After having made its purchase it had to set out a period of transition for occupants, and it was anxious to make this as easy as possible for them. One of the methods used was to honour existing leases or provide the tenant with a 12-month lease — whichever was the longer period — on the basis of rents in existence at the time the property was acquired by the Corporation. After this period rent was to be geared to income. This meant that

some tenants would enjoy a lower rental rate under the rent-geared-to-income formula used by the Corporation. In other cases tenants were faced with higher rents under the new income-based system. The minimum period of 12 months gave tenants adequate time to make other arrangements if they so desired.

Based on experiences with properties acquired in early 1965 — showing that changes of approximately 60 per cent in tenant occupancy have taken place — this technique has proved quite successful. As a method of providing accommodation it compares favourably with the time required to get new housing developments completed and occupied.

There was, of course, some reaction from tenants in the private sector and from local ratepayers' groups. A great deal of discussion went on at the time and the great fear was raised that properties would be devaluated and that social problems would be created by problem families. However, the larger real estate portfolio enabled the Corporation — by judicious tenant selection — to admit into this area tenants whose major problem was one of economics. The success of this social experiment was confirmed one year later in a study carried out by the *Globe and Mail*.

Variations in Direct Construction Programs

In most larger urban centres there are significant problems attached to acquiring land in core areas suitable for residential purposes. First, the land is very expensive; secondly, it generally requires rezoning to permit optimum use. Where needed, the powers of expropriation given under the urban renewal program can be used to acquire and clear land. However, this is a long, drawn out method, and often requires some three to five years before land can be acquired, cleared and made ready for development.

The Corporation has met these problems by inviting proposals on land normally considered appropriate for urban renewal purposes. Under this arrangement the private developer does all the 'leg work' involved in completing applications for rezoning and preparing preliminary schemes, estimates, working drawings and specifications. All this time he is assuming the substantial risk that the proposal may not gain acceptance by the governments concerned. The Ontario Housing Corporation so far has received two such proposals, and the basic designs have been well received at the municipal level. Cost per unit has been at least \$3,000 less than that normally achieved under the federal-

provincial-municipal urban renewal program. In addition it is expected that the time factor will be reduced substantially under this technique as compared with urban renewal schemes carried out under public auspices.

Land Owned by the Corporation

In those cases where land was owned by the Corporation, other proposals were received based on the type of housing and bedroom count stipulated by the Corporation. Only a portion of the land was set aside for public housing purposes. The remaining portion was to be used by the private developer according to a plan approved by the Corporation. The price of the land owned by the Corporation was fixed and the request was made that the proponent supply the Ontario Housing Corporation with approximately 20 per cent of the units intermingled throughout the subdivision. The selection of the developer was made by an independent architectural and planning committee, which, in reviewing the submissions, paid special attention to design, layout, price and specifications. This experiment proved conclusively that not only government but also private developers are prepared to work on residential integration. This arrangement has also been very acceptable to municipal officials, because they have been assured that subdivisions will be constructed from beginning to end precisely as outlined. Indeed, this appears to be an excellent method of making good use of the combined talents and resources of both government and private enterprise.

Development of University Village

In another instance the Corporation in conjunction with the Central Mortgage and Housing Corporation has acquired some 100 acres of land adjacent to a university with the intention of providing both private and public housing. This project — not downtown oriented — is being directed largely to meeting the needs of the university population. The architect acting for the Corporation is preparing detailed plans for the required moderate rental housing, working closely with a liaison committee of municipality, university and C.M.H.C. officials. Proposals will be called for the development of the entire 100 acres for both private and public housing. The number of units for private residential development is greater than that proposed for housing units to be administered by the Ontario Housing Corporation. Undoubtedly both staff members and students will be attracted to those sectors of the development which are appropriate to their physical and social

requirements and related to their capacity to purchase or to rent.

The proponent seeking to develop the property must have the financial stability and development experience necessary to undertake such a task. His proposal must outline the planning and actual designing proposed for the private properties and he must provide the assurance that the public housing will be constructed in accordance with plans prepared by the architect and approved by the Ontario Housing Corporation.

HOUSING CHARACTERISTICS

Unit Size

A review of the new housing acquired, constructed or under development by the Corporation during the 12 months ended March 31st, 1966, reveals a range of unit sizes from 513 to 1,649 square feet, with a mean average size per new unit of 1,152 square feet. The mean average size for all types of existing units purchased by the Corporation during this same period was 1,094 square feet.

Bedroom Count

Over 90 per cent of all the units acquired by the Ontario Housing Corporation during the same twelve months were in the 3, 4 or 5-bedroom category. The following schedule indicates the bedroom distribution both for new construction and existing structures.

<i>Bedroom Type</i>	<i>New Construction</i>	<i>Existing Structures</i>
<i>Per Cent of Total Bedrooms</i>	<i>Per Cent of Total Bedrooms</i>	<i>Per Cent of Total Bedrooms</i>
1 - Bedroom	0.9	3.2
2 - Bedroom	5.9	6.0
3 - Bedroom	60.0	90.3
4 - Bedroom	22.9	0.5
5 - Bedroom	10.3	—
Total	100.0	100.0

Unit Distribution

The following schedule shows the distribution of units among detached houses, duplexes, semi-detached houses, row houses, maisonettes and apart-

ment units constructed during the year ended March 31st, 1966.

<i>Number of Units</i>	<i>Type of Unit</i>	<i>Per Cent of Total</i>
138	Detached houses	7.4
16	Duplexes	0.9
223	Semi-detached houses	11.9
885	Row houses	47.4
352	Maisonettes	18.9
253	Apartment units	13.6
1,867	Total	100.0

These units are distributed according to bedroom-type as follows:

<i>Bedroom Type</i>	<i>No. of Units</i>	<i>Per Cent of Total Units</i>	<i>No. of Bedrooms</i>	<i>Per Cent of Total Bedrooms</i>
Bachelor	6	0.3	—	—
1-Bedroom	55	2.9	55	0.9
2-Bedroom	173	9.3	346	5.9
3-Bedroom	1,175	62.9	3,525	60.0
4-Bedroom	337	18.1	1,348	22.9
5-Bedroom	121	6.5	605	10.3
Total	1,867	100.0	5,879	100.0

Changes in Housing Costs

Based on statistics provided by the Central Mortgage and Housing Corporation for the first quarter of 1965 and 1966, the estimated average costs of new bungalows financed under the National Housing Act have risen sharply in one year. In both Ontario and Canada as a whole, construction costs have grown more rapidly than land costs, but in Toronto land costs have risen more rapidly. The table below indicates that average total costs have risen 22.6 per cent in Metropolitan Toronto, 12.0 per cent in Ontario and 8.4 per cent across all of Canada. However, the size of new bungalows as measured by floor area has grown as well, particularly in Toronto. Consequently, construction costs per square foot increased 13.4 per cent in Metropolitan Toronto, 7.9 per cent in Ontario and 6.9 per cent across Canada.

ESTIMATED COSTS OF NEW BUNGALOWS FINANCED UNDER NHA

	CANADA			ONTARIO			METROPOLITAN TORONTO		
	1st qtr. 1965	1st qtr. 1966	Per cent Increase	1st qtr. 1965	1st qtr. 1966	Per cent Increase	1st qtr. 1965	1st qtr. 1966	Per cent Increase
	\$	\$		\$	\$		\$	\$	
Land	2,797	2,929	4.7	3,800	4,100	7.9	5,200	6,600	26.9
Construction	12,833	14,036	9.4	12,900	14,600	13.2	12,500	15,100	20.8
Other	292	290	—	—	—	—	—	—	—
Total	15,922	17,255	8.4	16,700	18,700	12.0	17,700	21,700	22.6
Finished Floor Area (Sq. Ft.)	1,147	1,174	2.4	1,145	1,198	4.6	1,225	1,305	6.5
Construction Costs per Sq. Ft.	11.19	11.96	6.9	11.27	12.19	7.9	10.20	11.57	13.4

Source: Central Mortgage and Housing Corporation.

GENERAL REMARKS

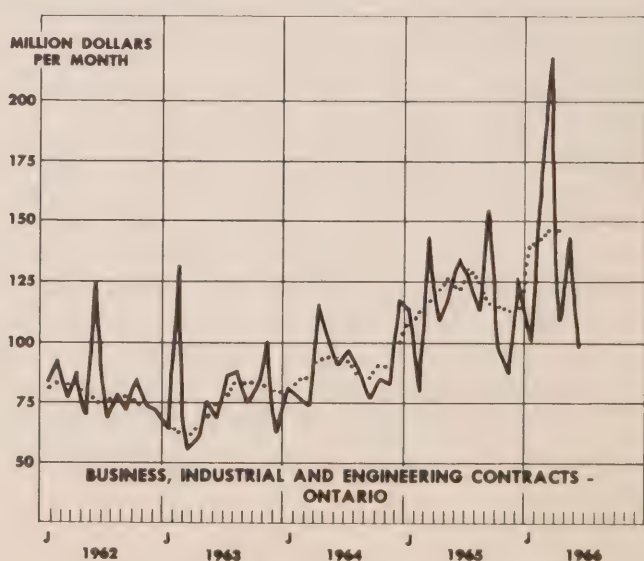
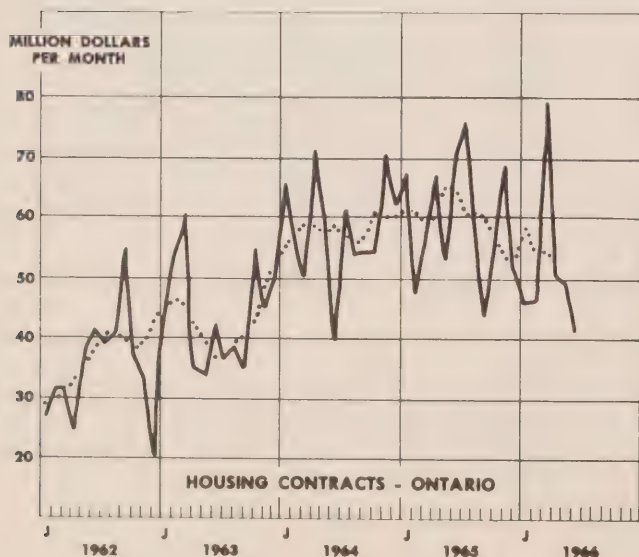
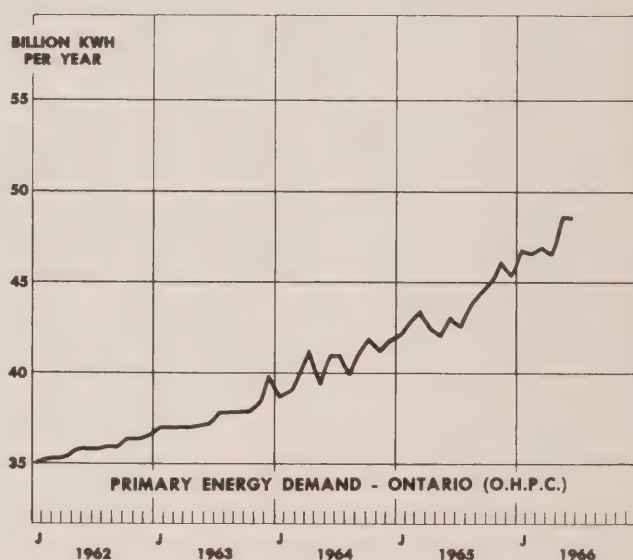
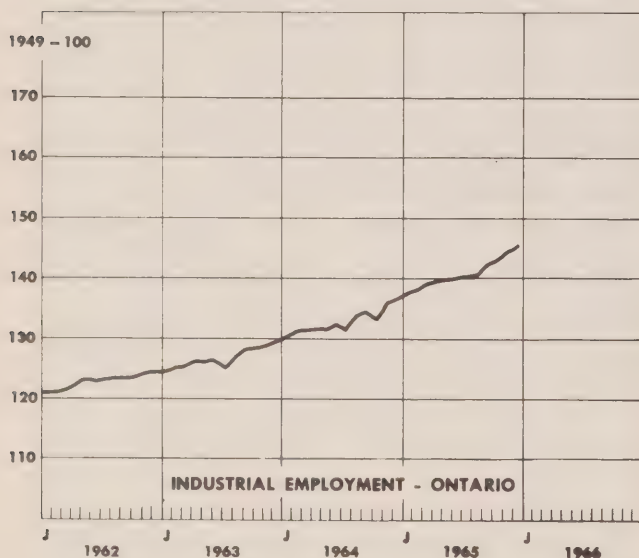
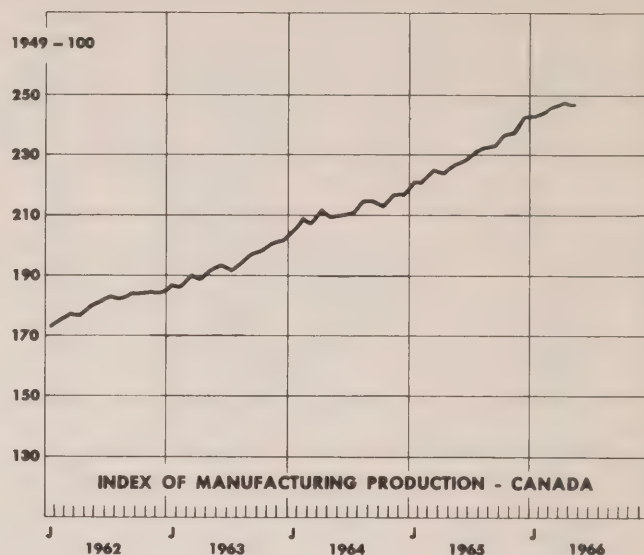
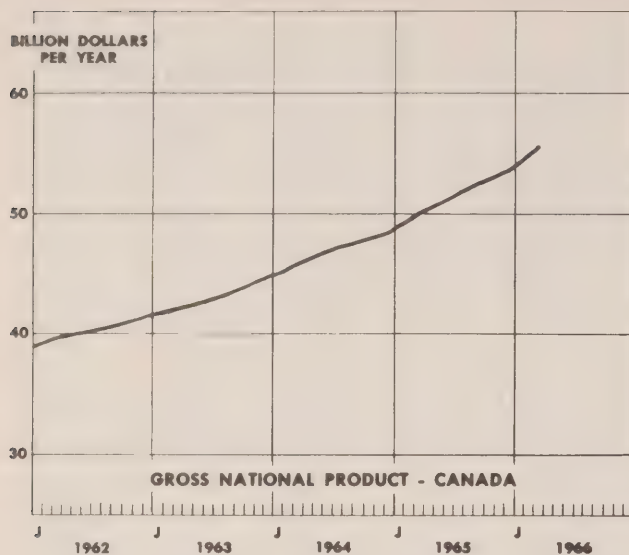
The different techniques used by the Ontario Housing Corporation have paid encouraging dividends in terms of quality of product and price. This is not to say that price alone has been the criterion: in many cases the Corporation has paid a higher price under "builder proposal" arrangements in order to acquire good housing stock. But it does mean that it has received good value for the expenditure made.

The basic advantage of "builder proposal" arrangements has been in having the developer and architect under one roof, with the developer making the basic decisions. It is evident that the old method

— engaging an architect, preparing detailed plans and specifications and then going to tender — requires reassessment. Sophisticated builders are anxious to put a good product on the market, and they have a lot of know-how in a complicated industry. Public housing should take advantage of this.

The experience of the past few years confirms the fact that the job of housing low income families and senior citizens cannot be carried out successfully without the full support of private building industry. As a result of the Corporation's use of new techniques, the time required to accommodate low income families and senior citizens in good, safe and sanitary housing has now been substantially reduced.

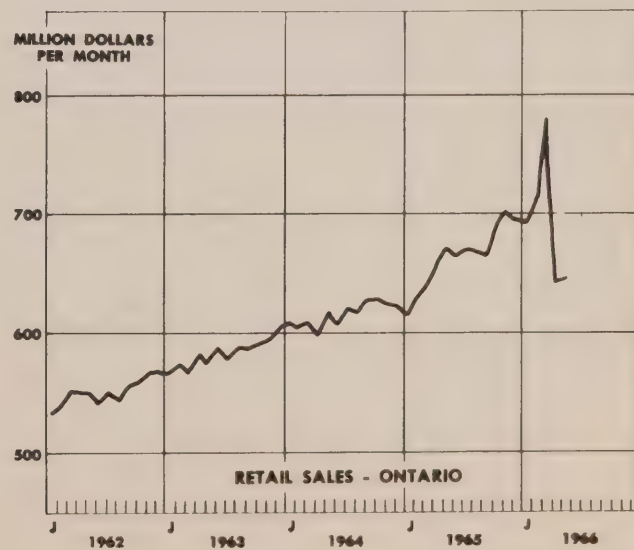
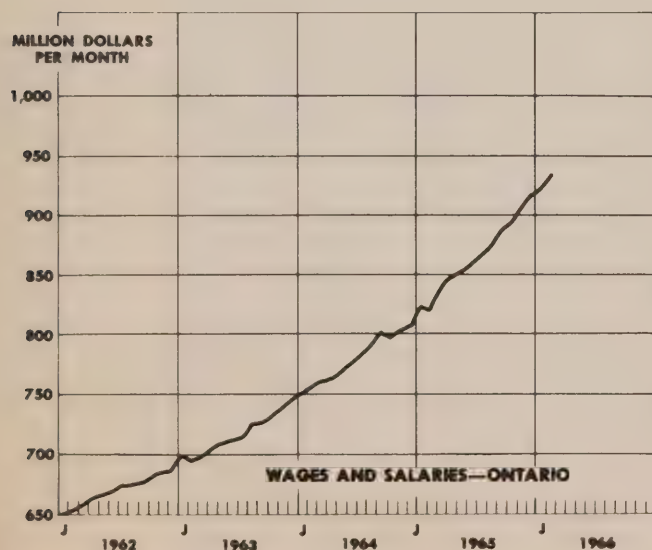
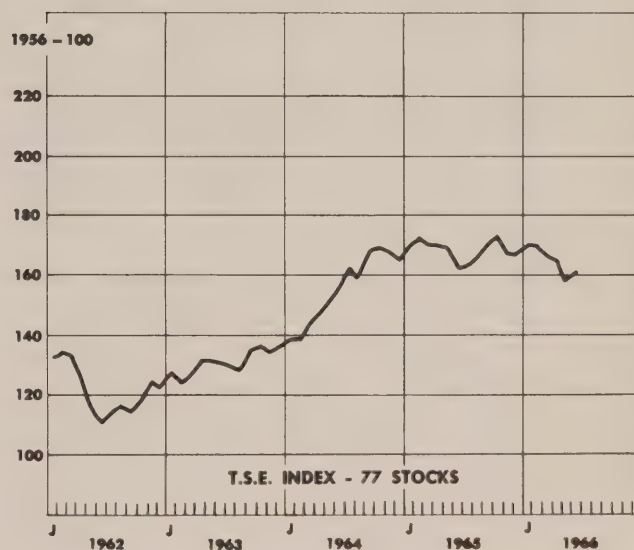
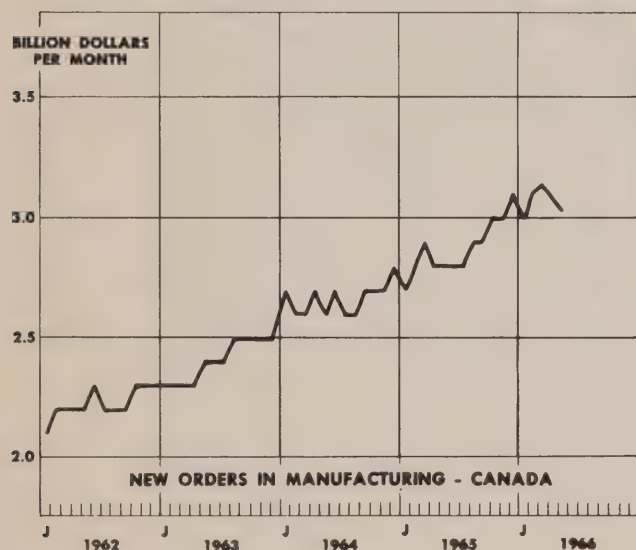
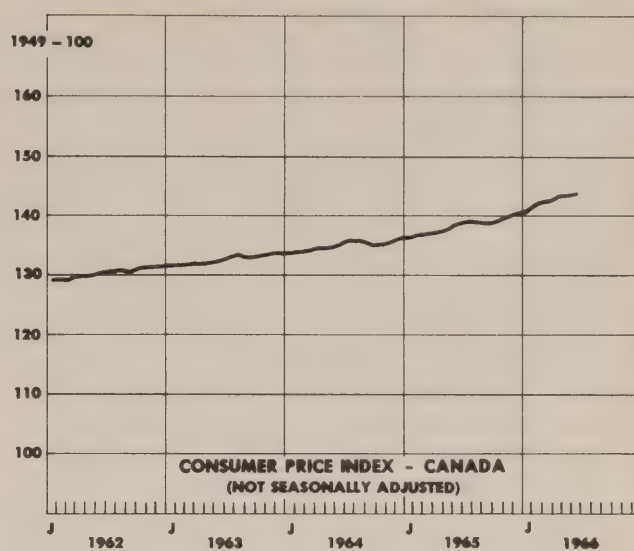
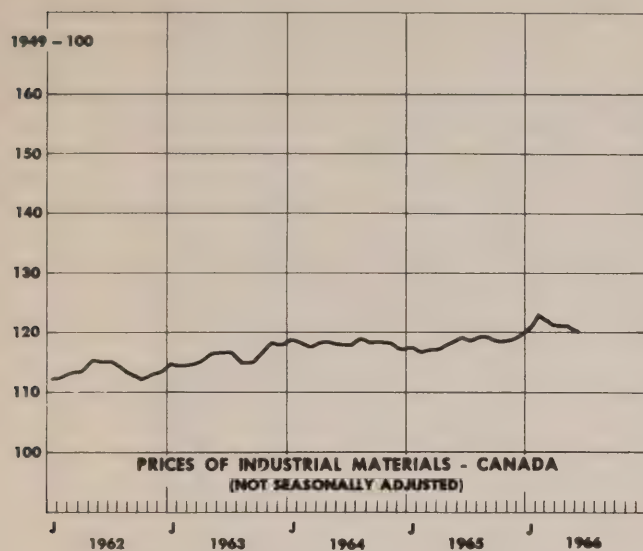
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



..... TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



(* Figures for Canada)

(i) Revised series; base changed from 1949=100 to 1961=100.

ONTARIO ECONOMIC REVIEW

DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

OFFICE OF THE CHIEF ECONOMIST

H. Ian Macdonald, Chief Economist



ECONOMICS DEPARTMENT
Humanities and Social Sciences



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CONTENTS

The Ontario Economy	1
Economic Education, <i>Miss Beryl L. Joyner</i>	4
Indicators and Charts	10

THE ONTARIO ECONOMY

There were further indications in the economy that the very rapid growth of the first quarter of 1966 was giving way to more moderate growth in succeeding months. Industrial production, reflected in the Index of Industrial Production for Canada, declined from 273.8 in May to 273.1 in June (1949=100). This was due in part to lower consumer demand for durables, particularly for automobiles, and in part to lower mining production (itself reflecting output-curtailling strikes). Contract awards for residential construction in Ontario remained well below last year's level, virtually assuring a lower level of housing starts for 1966 than for the previous year.

Retail trade, however, did pick up somewhat in June, following two months of drastically lower sales resulting from the April 1st increase in the Ontario retail sales tax. Valued at \$701 million in June, these sales returned to the approximate level they had reached at the beginning of the year.

The rate of unemployment was maintained at a satisfactory level during the summer, although it did increase somewhat from the very low level of March and April. By August this rate had risen to 3.3 per cent, seasonally adjusted. Nevertheless, on a cumulative basis unemployment for the eight month period of 1966 was 2.6 per cent of the labour force, comparing favourably with the 2.7 per cent rate for the corresponding period of 1965.

One of the most interesting developments recently has been the rise in prices, particularly food prices. According to the Consumer Price Index for Canada, the food component in July was 5.0 per cent higher than one year earlier. Combined with significant increases in health and personal care, urban transportation and home ownership costs, this has produced an increase of 3.4 per cent in one year in the overall Index. Rising food prices — in most respects

a short-run phenomenon related to shortages of meats — received particular attention from housewives. All across Canada and the United States groups were formed protesting high food prices in the large chain stores. However, aside from increases in these selected categories, most other components of the Consumer Price Index rose moderately.

Production

Steel ingot production in Canada, unadjusted for seasonal variations, was 827.7 thousand tons in July, a decline of 2.8 per cent from the previous month. This was also 0.9 per cent less than the July 1965 level of 835.0 thousand tons. Yet in a comparison of the January to July periods for this year and last there has been an increase in production of 4.4 per cent.

Canada's Index of Industrial Production (based on 1949=100) fell slightly from May to June, with the seasonally adjusted Index declining from 273.8 in May to 273.1 in June. Over the past 12 months, however, the Index has risen 8.5 per cent.

The month-to-month decline reflects the recent easing that has occurred following the rapid growth of the preceding period. From May to June the mining component fell 1.4 per cent, while manufacturing declined 0.2 per cent — with durables and non-durables contributing equally to the decline. Electric power and gas utilities rose 0.7 per cent.

The decline in the mining index came about as a result of lower production in non-metals and fuels, which declined 8.3 per cent and 1.7 per cent respectively. In metals, gold dropped 13.2 per cent but was countered by a 14.2 per cent increase in nickel production; consequently the metals component rose fractionally.

Non-durable manufactures were influenced by

significant declines in printing and publishing, in tobacco products and in rubber products, while increases in foods and beverages and in textiles helped to moderate these declines somewhat. In durables, the declines in most categories were nearly offset by increases in transportation equipment and non-ferrous metal products.

In spite of this mild one-month drop in industrial production, the June level of production was up significantly from 12 months earlier. Between June 1965 and June 1966 the Index rose 8.5 per cent, the result of a 10.0 per cent increase in mining, a 7.3 per cent increase in manufacturing (8.3 per cent and 6.3 per cent for non-durables and durables respectively) and a 16.8 per cent gain in electric power and gas utilities.

Manufacturing shipments in Ontario reached \$1,705.3 million in June, a year-to-year gain of 7.1 per cent. Increased shipments in foods and beverages, rubber industries, primary metal industries and chemicals and chemical products industries were the principal contributors to this overall gain. In the six-month period this year shipments have reached \$9,675.6 million, 10.7 per cent more than the six-month period for 1965.

Construction

The value of Ontario's construction contract awards, not seasonally adjusted, was \$198.8 million in August, according to the *Southam Building Guide*, up \$33.5 million — over 20 per cent — from one year earlier. This improvement came after two months during which awards were well below the levels reached in 1965. All broad groups of construction activity except residential construction contributed to this increase. Due largely to lack of readily available funds, residential construction awards were down to \$55 million, \$13 million less than in August 1965. Reduced apartment building contracts accounted for the decline; they dropped from \$31.2 million to \$17.0 million in 12 months. Residences were actually up almost \$13 million to a level of \$38.0 million.

All other types of construction were higher than last year, particularly institutional construction. A large increase in construction awards for schools and colleges as well as medical and hospital facilities brought that group up to \$46.4 million — more than 60 per cent above last August. Awards for business construction, at \$18.7 million, were up an equally impressive 50.6 per cent.

"Big Jobs" in Ontario — construction contract

awards of \$1.0 million or more — were valued at \$72.8 million in August. Some are listed below:

LARGE CONSTRUCTION AWARDS PLACED RECENTLY IN ONTARIO

<i>Location</i>	<i>\$ Million</i>	<i>Description</i>
Ajax	2.0	School addition
Brampton	3.3	School
Bruce Lake	11.1	Initial work on railway
Hamilton	2.4	YWCA building
Iroquois	1.0	Warehouse
Kingston	1.2	Apartments
Kitchener	1.3	Relocation of utilities
London	1.0	Apartments
Markham Twp.	2.1	Housing
Napanee	2.1	School addition
Nepean Twp.	2.5	School
Ottawa	1.6	Office building
Owen Sound	1.4	Plant
St. Catharines	2.0	School
Sarnia	2.5	Telephone exchange
Sudbury	1.2	Housing
Thorold	1.2	School addition
Timiskaming	1.1	Repairs to dam
Toronto	6.9	Rapid transit structures
Toronto (metro)	5.2	Schools
Toronto (metro)	5.0	Apartments
Waterloo	1.6	University building
Windsor	1.0	School addition
Yarmouth Twp.	1.1	Water intake

Source: Southam Building Guide.

For the first eight months of the year construction awards have been \$1,445.0 million — down \$6.0 million or 0.4 per cent from the corresponding period in 1965. While residential construction has played an important role here, being consistently below last year's level, in recent months uneven performances have been evident in other areas of construction. To a large extent this has reflected the recent moderation in the overall growth in the economy.

Actual housing starts in Ontario centres of 5,000 population and over were down 58 per cent to 3,809 dwelling units in August. For the eight months of this year the total has been 29,416 units, a 26 per cent decline from last year.

In Toronto, where the housing problem has been acute, starts were 62 per cent lower than 12 months ago, down from 5,219 to 1,981. In Hamilton and Ottawa similar sharp declines were evident.

Completions in August numbered 5,933 units, bringing the January to August total to 41,029—a significant increase from the 31,693 units recorded

in 1965. Units under construction at the end of August were 30,483 this year, down from 52,002 units at the same time last year.

Employment

Ontario's labour force, seasonally adjusted, passed the 2.7 million mark in the early part of 1966, and by August was 2,768 thousand. Throughout most of this period the rate of unemployment remained quite low – even better than the very impressive rate of last year. However, by July the rate had edged past three per cent; and by August it was 3.3 per cent of the labour force. But in spite of the fact that this was higher than the March and April rate of 2.1 per cent, it nevertheless reflected a quite favourable employment picture. In actual numbers, employment reached 2,679 thousand in August while the unemployed numbered 89 thousand.

At the national level, unemployment was 4.0 per cent of the labour force, seasonally adjusted. Canada's labour force was recorded at 7,482 thousand, the number employed 7,182 thousand.

In a comparison of cumulative rates of unemployment for the first eight months of this year, Ontario has had an overall rate of 2.6 per cent compared with Canada's 3.6 per cent of the labour force. The corresponding figures for 1965 were 2.7 per cent and 4.1 per cent for Ontario and Canada respectively.

Prices

The Consumer Price Index for Canada moved up 0.3 per cent from June to July, reaching a level of 144.3 (based on 1949 = 100). A 1.2 per cent increase in the food component was the major factor in this increase. The only other component to increase was housing, which rose a slight 0.3 per cent. Clothing and health and personal care both declined slightly while the other components remained the same.

The price increases in food were largely related to dairy products, all fat products except lard, and most beef and pork cuts. Increases were also recorded in tea, coffee, grapefruit, oranges, apples, frozen orange juice, turnips, tomatoes, celery and lettuce. Declines were evident for sugar, pickles, jelly powder, evaporated milk, eggs, chicken, turkey, lard, hamburgs, smoked ham, sausages, bananas, grapes, strawberries, most processed fruits, potatoes, carrots, cabbage and tomato juice.

The increase which took place in housing was the

net result of advances in rents, home-ownership and most components of household operation. The price decreases were mainly confined to selected household appliances.

Looking at the changes over the past year, it is evident that food has been one of the major forces accounting for the somewhat larger increase in the overall Index. From July 1965 to July 1966 the Consumer Price Index rose 3.4 per cent. The food component rose 5.0 per cent, clothing 3.4 per cent and health and personal care 3.2 per cent. All other components were between two and three per cent higher than in July 1965.

Retail Sales

Ontario's retail sales in June recovered much of the ground lost in the decline of the two previous months. The seasonally adjusted value rose to \$701 million, 8.3 per cent higher than the May's \$647 million.

On an unadjusted basis, retail trade climbed to \$729.7 million, and was 5.9 per cent higher than during June, 1965. This year-to-year increase for the month was close to the 6.1 per cent average for the whole of Canada. The major factor in Ontario's lower-than-average growth was the low level of motor vehicle sales; they were down 11.4 per cent from one year earlier. All other categories were up, most of them quite significantly. For example, variety store sales were 21.4 per cent higher, while women's clothing and shoes were up over 17 per cent and 13 per cent respectively. Lumber and building material dealers were the only ones whose year-to-year increase could be considered small – only 1.1 per cent. This points out the very significant role that motor vehicle sales play in the overall total. In Ontario it accounted for 16 cents out of every dollar of retail sales.

While the movement of sales in June is of interest, it is the total for the first six months of 1966 that gives the time picture of overall growth. During that period sales were 6.9 per cent higher than in the corresponding period last year. Once again, motor vehicle sales were the only ones that had declined, but it was down only 0.2 per cent overall. Variety stores, women's clothing stores and appliance and hardware stores were all up at least 10 per cent. Lumber and building material dealers, up only slightly for the months of June, were 13.0 per cent higher based on the comparison of six-month totals.

ECONOMIC EDUCATION

MISS BERYL L. JOYNER

Economist, Economic Planning Branch

Ontario Department of Economics and Development

The Department of Economics and Development has recently published a booklet entitled *The Economy of Ontario*.⁽¹⁾ Its publication is indicative of the Department's interest in simplified instruction in economics outside the universities, and in the dissemination of economic information generally. It also offers an occasion for some discussion of economic education in Ontario.

This subject can be conveniently divided into four parts, namely: the need for economic education; *The Economy of Ontario*; the uses of the booklet; and, a technique for simplified instruction.

The Need For Economic Education

The need for instruction in economics exists for two main reasons. First, the circular nature of the economic process means that there is continual interdependence between entrepreneurs, producers, consumers and government. If this interdependence and its implications were more widely understood, the individual would have a better understanding of his relation to the whole process, and this would provide him with a better basis on which to make his personal economic decisions. It would also provide him, as a voter and a taxpayer, with a better basis on which to form an opinion on economic policy. In the long run it might also increase the likelihood of obtaining cooperation between the sectors and so ease the difficulties of maintaining simultaneous economic growth and stability. Second, in any particular economy, a widespread knowledge of its physical resources is a necessary basis for an awareness of opportunities for economic growth. It is the use made of resources and opportunities and the efforts made to overcome shortages which make economic growth possible. Such use and effort must, of course, be based on a knowledge of what exists.

Simplified instruction in economics⁽²⁾ is necessary because it is impractical for persons who do not intend to become professional economists to under-

take a long and rigorous course of studies of the kind traditionally offered by universities. Nor is it necessary. The layman does not need to conduct rigorous economic analysis. What is important for him is that he be able to make intelligent decisions for his own economic well-being. To do this he needs to understand his relation to the whole economic process. For this purpose simplified instruction in economics should be sufficient.

Instruction, however, is necessary. Economics is more than a collection of facts. As John Maynard Keynes once expressed it:

"The theory of economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions."⁽³⁾

It is unreasonable to expect this to be apparent without instruction. Moreover, the interested layman, if he had the time, could read a number of economic texts without forming a clear, basic understanding of what the economic process is and how it functions. Indeed, since economic theory is traditionally taught in consecutive segments,

⁽¹⁾ Prepared in the Office of the Chief Economist, Ontario Department of Economics and Development (Queen's Printer, Toronto, 1966). Single copies will be available to the public free of charge in December. They may be obtained by writing to the Editor, *Ontario Economic Review*, Ontario Department of Economics and Development, 950 Yonge Street, Toronto 5, Ontario.

⁽²⁾ The need for simplified instruction in economics is a question relatively new to Canada. It has, however, been arousing widespread attention in the United States for some time. An interesting indication of this is the fact that *Challenge: The Magazine of Economic Affairs*, (Institute of Economic Affairs, New York University) devoted its issue of March 1964 to the problem. The issue has an impressive list of contributors, each of whom discusses a different aspect of the problem.

⁽³⁾ Introduction to the Cambridge Economic Handbook Series (James Nesbet & Co. Ltd., Cambridge, at the University Press).

many university students of economics have virtually completed a course of undergraduate studies before being able to formulate such a concept.

In reading privately, the interested layman would share another problem with the university student of economics — technical language. It is, of course, necessary for members of the same profession to be able to communicate precisely, and, at its best, that which is jargon to the layman is to the economist the precisely defined language which makes such communication possible. But the use of technical language has made economic texts, and the texts of other disciplines, virtually unintelligible to the layman, for whose use they were not intended.

He must, therefore, be offered instruction which keeps the use of economic terms to a minimum, and which begins with a primary concept of what the economic process is and how it functions and then builds from this initial understanding to a point where he can intelligently comprehend the efforts made to maintain simultaneous economic growth and stability.

The need for simplified instruction in economics has already been recognized by the Department of Education. A course in economics is now included in the curriculum offered to Grade XII four-year course high school students. Economics is not, however, included in the curriculum offered to five-year course high school students. Many five-year students will, in the course of their working life, frequently make decisions which will affect the economic process. Most will be producers and taxpayers. All will be consumers. The inclusion of economics in the curriculum offered to five-year course high school students is, therefore, a question worth serious consideration.

Equally important is the fact that most of the present entrepreneurs, producers, consumers, investors, taxpayers and voters are adults. Since there is little point in expecting universal interest in a program of economic education for adults, such a program should have the general aim of reaching people interested in social and economic problems. Within this wide swath, certain groups can be usefully distinguished for the purpose of providing a difference in emphasis in the information offered. For instance, the middle and upper echelons of business management could be offered information about the principles of monetary and fiscal theory and the role of government in seeking to provide the climate for stable economic growth. They could then be invited to discuss how cooperation between busi-

ness and government might be fruitfully extended. Trade union leaders could be offered information about the importance of increasing productivity and the desirable relationship between productivity and wage rates. Consumers could be offered information about their potential influence on the allocation of resources. Producers could be offered information concerning the importance of their role as suppliers of a factor of production. And investors could be offered information concerning the difference between speculation and investment.

A number of potential avenues exist for the dissemination of this kind of economic information. Business management in metropolitan Toronto would probably be best approached through the Chamber of Commerce and the Board of Trade. In the remainder of the province, the auspices of the Regional Development Councils might be utilized. Trade union leaders might be best approached through the Canadian Labour Congress.⁽⁴⁾ As members of the socially aware public, consumers, producers and investors could be reached by educational television programs and by including elementary economics among the evening courses offered by a variety of institutions.

The advantages of simplified instruction for the layman in many disciplines might justifiably be enumerated. It is therefore useful to remind ourselves that, while providing his material needs is not the most important thing a man can do, unless he does it, he is not free to do much else.

The Economy of Ontario

The Department of Economics and Development published *The Economy of Ontario* to provide reference material relating directly to Ontario. As explained in the preface: "The general approach of the book is descriptive rather than theoretical. That is, it seeks to give the reader a knowledge and appreciation of the forces determining the pattern and pace of economic activity in Ontario without introducing him to the body of economic laws or theories commonly used to rationalize these forces."⁽⁵⁾ But to encourage this appreciation, the structure of the booklet is implicitly theoretical.

⁽⁴⁾ In 1963 the Labour College of the Universities of Montreal and McGill was organized on behalf of the Canadian Labour Congress and the Quebec Federation of Labour. This College offers an eight-week summer course to 85 students, in two groups, one English-speaking and the other French-speaking. The course includes political science, history, economics, sociology and trade union history and principles.

⁽⁵⁾ *The Economy of Ontario*, op. cit., preface.

One of the cornerstones of economic theory, for instance, is the relation between supply and demand. The booklet describes the forces which determine the effective and potential demand for Ontario's production, i.e., population, income and location; and then explains that it is these forces which create Ontario's markets and so make it possible to utilize the province's supply of resources. It then describes in some detail these resources and the combination in which they exist in Ontario. While doing so, the booklet draws attention to the advantages to be derived from the province's combination of natural resources. It also describes Ontario's human resources and sources of capital. In each of these cases, it makes clear that the province suffers shortages relative to its supply of natural resources and to the potential demand for its output. That natural resources, labour and capital are the factors of production, and that these three factors must be efficiently combined for optimum production is inherent in the text.

The booklet then turns its attention to the sectors of production. The same approach is used. The parts of the primary, secondary and tertiary sectors are described and their relationship is explained. It is made clear, for instance, that adequate food supplies to support dense urban populations are a prerequisite for industrial development; and that as industry develops, the demand for services increases. The reader is introduced to the shift in factors from the primary to the secondary and, more recently, from the secondary to the tertiary sectors. He is also told how such adjustments are effected and that the underlying explanation for Ontario's economic growth is the province's flexibility in exploiting its resources. The allocation of resources and the far-reaching consequences of this important principle are implied throughout this discussion.

The last section of the booklet discusses Ontario's potential for further growth. Using examples, it explains that while this potential is good, growth cannot be assumed. What is being implied here is the dynamic nature of the economic process. Hopefully it will arouse in the reader some understanding of the importance of his conscious participation in this change.

The booklet has a shortcoming. The role of government is barely mentioned. Given that the formation of social capital and the provision of services beyond the competence of the private sector are important to the economic process, and that the citizen becomes a taxpayer in making the

allocation of his resources necessary for this to be done, an understanding of this role is important.

The figures quoted in *The Economy of Ontario* must eventually become outdated. But the orders of magnitude are unlikely to change significantly in the near future; and if the present demand for the booklet is maintained,⁽⁶⁾ there may be an opportunity for updating. This difficulty, therefore, should not prevent the booklet from fulfilling its purposes.

Uses of the Booklet

It is expected that *The Economy of Ontario* will be widely used in the high schools by the teachers of economics as reference material relating directly to Ontario. The implicitly theoretical structure of the booklet will enable teachers to demonstrate a concrete application of the principles of economics. At the same time, the booklet offers information about the resources and opportunities available in the province. It is, therefore, complementary to a simple text explaining the elements of economic theory; and by using both, teachers can offer a course which fulfills the two main purposes of teaching economics outside the universities.

It is also hoped that the booklet will be useful to high school teachers of geography. Geography teachers cannot, of course, be expected to make explicit the principles of economic thought which underlie the structure of the booklet; but it will be of value if geography students learn some facts about the Ontario economy and gain at least an implicit understanding of their relationship. This is of particular importance at the moment, when the curriculum for the five-year high school course does not include economics.

The booklet will also serve to answer some of the more serious enquiries which the Department of Economics and Development receives about the structure and functions of the Ontario economy. The fact that many such enquiries are received is an indication that a latent demand for adult economic education exists in Ontario.

If a program to meet this demand were supplied, *The Economy of Ontario* could complement simplified instruction in economic theory in the same way as it is expected the booklet will in the high schools.

⁽⁶⁾ Heavy demand for the booklet has already depleted the original printing of 5,000 copies, and a second printing of 11,000 is now under way. Of the original 5,000 copies printed the Department of Education has distributed 2,500 to educational institutions. The Department of Economics and Development has distributed the remainder in the government and to the news media, libraries and interested individuals.

A Technique for Simplified Instruction

The task of providing simplified instruction in economics is a difficult one. There is a risk of oversimplifying to the point where what is said is no longer valid. Obviously such a risk cannot be taken with the training of future economists. But the reason for providing generalized instruction is different. Here the task is to acquaint the layman with the nature of the economic process.

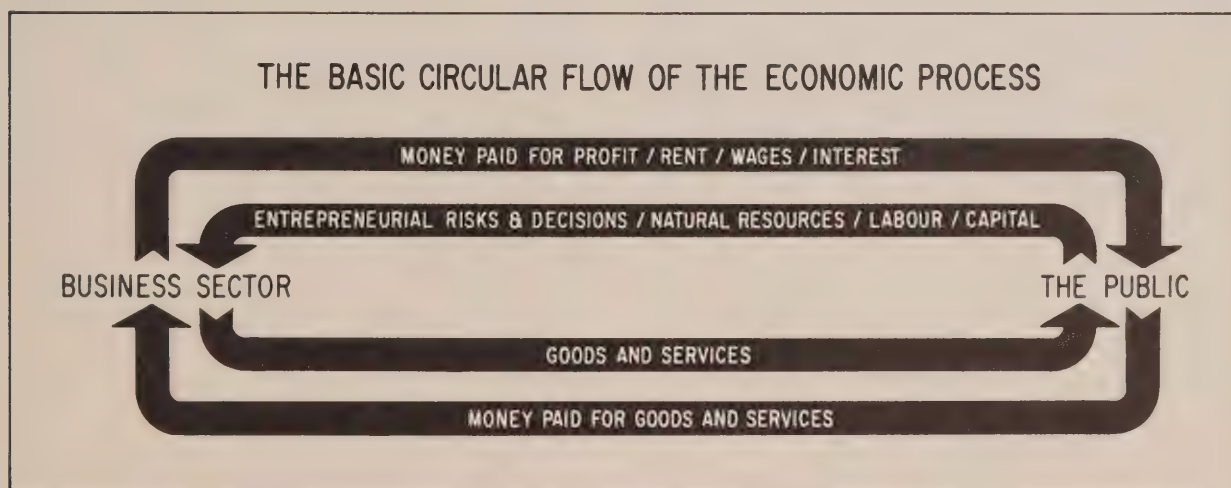
What is needed for this purpose is a concept of the economic process in its simplest form, so presented that the complexity of this concept can then be gradually built up. A number of ways of meeting this need might present themselves to economists. One is to employ the familiar national income/expenditure flow system, which delineates the components of the economy and shows the relation between them. Using this approach has two specific advantages. The diagram depicting this flow can be stripped to reveal the basic circular flow in the economic process. (See diagram.) It can then be built up step by step until all the income flows have been reincorporated in the diagram. When this has been completed, the complex concept of the economic process has been established. At the same time, the diagram acts as a pedagogical device to unify the course, because it can be displayed visually while the workings of the various sectors are discussed. In this way, the relation of each sector to the whole process is always apparent.

student. At the same time, further instruction can be built up concretely from the initial presentation of this basic circular flow.

The topics of supply and demand and the allocation of resources can be validly discussed as the inner workings of the business sector, while the understanding of the relation of the business sector to the economic process as a whole is kept in view. It can be kept physically in view by prominently displaying a diagram of the basic circle of flow, while further instruction is in progress.

The fact that the principles of supply and demand and the allocation of resources are also at work within the government sector must be included in the final stage of the discussion of their workings in the business sector. Otherwise it will not be made explicit to the student that the workings of these principles is not confined to the business sector. A discussion of the workings of the government sector could therefore logically follow and, in this case, the diagram representing the basic circle of flow would receive its first additions in the form of sub-circles representing flows through municipal, provincial and federal government channels.

Or, discussion of the workings of the government sector could be set aside, while the principles behind the creation and control of the money supply are discussed. This also is logical because price as the nexus of allocation would have been the culminating point of the discussion of the workings of the



The first lesson or lessons can be devoted to building up this basic circular flow. As soon as it is established and its implications made clear, the interdependence of all members of society for their economic well-being is apparent. The need for further instruction is thus immediately explicit to the

business sector. It is reasonable, therefore, to develop this point by making explicit that the flow of money is a continual series of exchanges through which allocation is effected; and to proceed from this to a discussion of money itself. Discussing the principles behind the creation and control of the

money supply at this point offers the further advantage of making full use of the circular flow diagram before it is complicated in any way.

Simple additions to the diagram can then be used to demonstrate the effects of exports and imports and also of saving and investment.

Then a step-by-step transformation of the original diagram can be made, until it represents the national income/expenditure flow system. In effecting this transformation, it would be more practical to represent only the flows of money. The student should already have some grasp of the relation between goods and money; and a diagram representing both the domestic flows of money in their totality and the accompanying inverse flows of goods and services would be cluttered. However, once the diagram representing the national income/expenditure flow system has been established, the corresponding flows of goods and services should be made explicit. At this point an explanation should also be given of the purposes served by investment by government, building up a stock of social capital, and providing a flow of services beyond the competence of the business sector to provide.

This leads logically to a discussion of what is known about cyclical control. What automatic stabilizers are and how they function should be clearly explained. Students should be told frankly of the difficulties of calculating the correct amount of induced change either by monetary or fiscal action or some combination of these actions. They should also be told of the importance of the cooperation of every member of society in the effort to maintain simultaneous economic growth and stability. Since the fact that the economic process rests on interdependence will have been explicit since the outset of the course, the gradual sophistication of the concept of what the economic process is and how it functions should lend itself to a deepening of individual awareness of the difficulties of the problem. This, in turn, should arouse the student's interest in learning how to appraise economic policy. It is at this point that special emphasis can be laid on the roles of business management, producers, consumers and investors.

Since international trade is of importance to our economy, it would be desirable to extend simplified instruction into this field. The flow of international trade can be represented diagrammatically as passing through many domestic circles of flow and this enlarged diagram used to demonstrate the principle of comparative advantage. Since the flow of international trade does pass through the domestic circles

of flow, the relation between international trade, the balance of payments, the foreign exchange rate and the question of tariffs can also be conveniently shown. At this point, too, foreign investment, previously touched on when the effects of savings and investment were shown by a simple addition to the original diagram, can be placed more fully in perspective.

It is not, of course, suggested that these topics which economists know to be so complex should be presented in a complicated way. That is not necessary. All that is necessary is to acquaint the layman with the pattern. If this acquaintance is based on a firm understanding of the basic concept, and if the relation of each addition to it is clearly represented, he should carry away with him a clear notion of the pattern of the total complex concept. The pedagogical objective is not to produce ersatz economists. It is to explain to the layman his relation with the economic process. To provide instruction to this point, it is only necessary for the economist to be himself very clear about how the structure of the economic process is designed.

Designing a course of simplified instruction in economics in this way has several advantages. First, it demonstrates immediately the need for instruction in economics and keeps always before the student the importance of the way in which he governs his own economic activity. Second, it lends itself to presentation at varying levels of difficulty. It is, therefore, suitable for either high school students or adults. Presumably adults would grasp the basic concept more quickly and would be interested in a more detailed presentation later on in the course. They would therefore be expected to absorb more information in the same time than could high school students. Third, emphasis on the importance of various contributions to the economic process can readily be incorporated, while at the same time showing the relation of any particular contribution to the whole process. Fourth, a student who does not pursue his study very far will still take away with him at least an elementary grasp of the process as a whole and his place within it. Fifth, such a student will not suffer disenchantment with economic studies due to inability to appreciate the importance of a segment studied before its relation to the whole has been perceived. Sixth, if at any time such a student resumes the study of economics, he will have a basis on which to build. Seventh, because this method progressively emphasizes the importance of the individual to the economic process and the importance of the economic process to

the individual, many students may be encouraged, after a course of simplified instruction, to undertake a more rigorous study of the discipline. And eighth, a course designed in this way could be readily adapted to a series of television programs, which would be a most convenient way of reaching both high school students and adults.

In presenting such a simplified course, the instructor should at every stage accompany the exposition of the principles at work by a concrete explanation of how these principles are affecting the economy of Ontario. As has been mentioned, a good deal of this information is now available in *The Economy of Ontario*.

The Department of Economics and Development is now experimenting with the presentation of economic thought in simplified form along the lines suggested in this article. At the Canadian National Exhibition, a model representing the basic circle of flow was displayed. The movement of flow was simulated by lighting and this simulation was accompanied by a tape-recorded explanation of what the diagram represented. Due to technical difficulties, it was only possible to directly represent the flow of money. The accompanying inverse flow of goods and services could therefore only be indicated. Even so, it was found that the public grasped the primary concept of what the economic process is and how it functions.

The Women's Advisory Committee has found widespread interest in its programs which include information about the role of the consumer. The Committee is now extending its activities, on a pilot basis, into the high schools. This pilot program is offering to Grade XII and Grade XIII students an introductory lecture, utilizing the diagram representing the basic circle of flow and placing particular emphasis on the probable future role of the student as a producer. This lecture is followed by

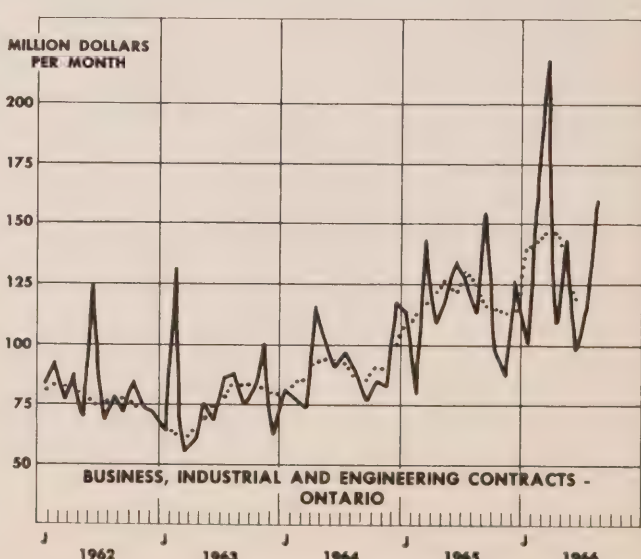
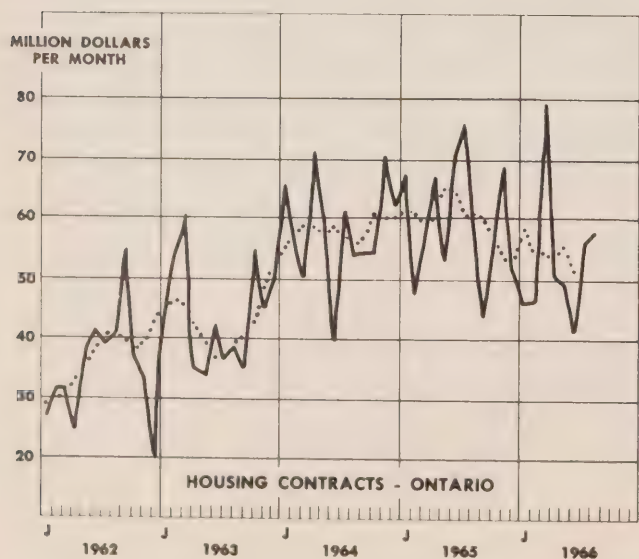
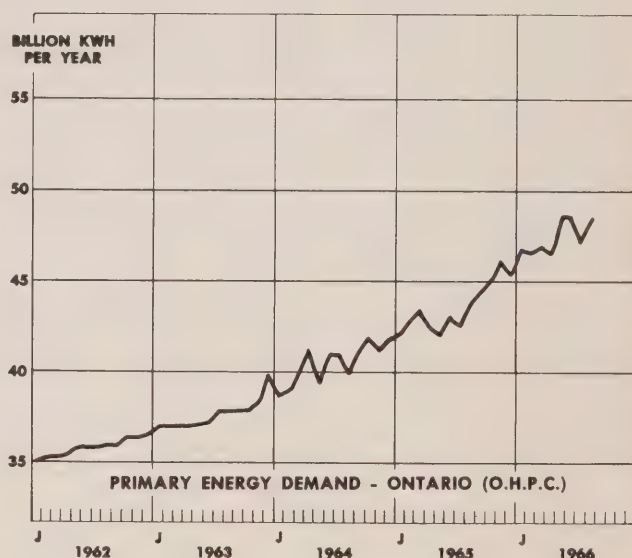
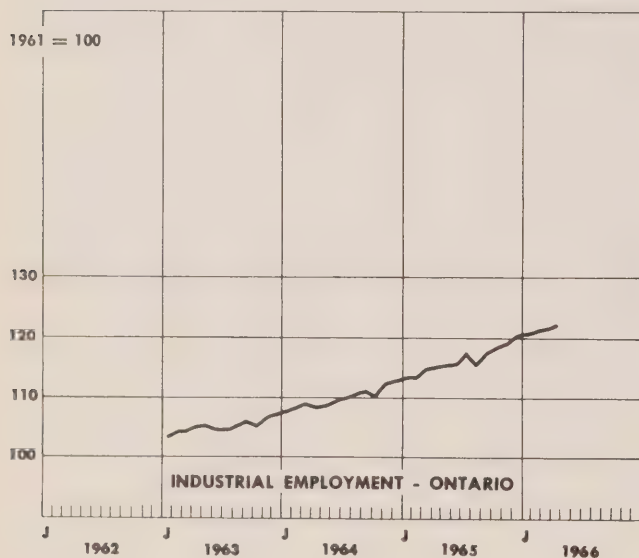
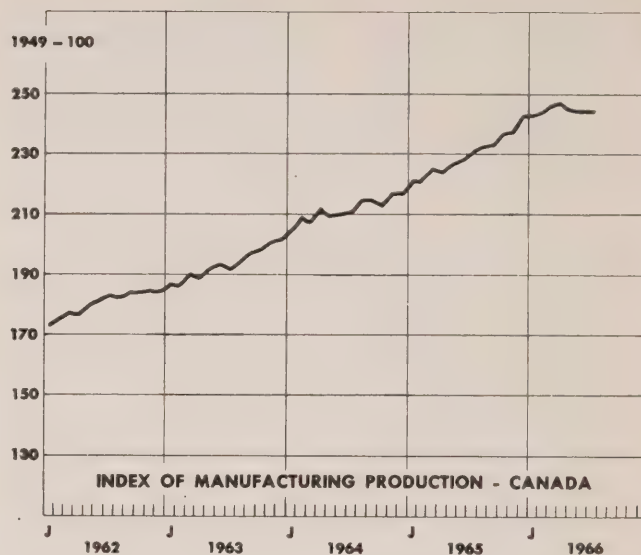
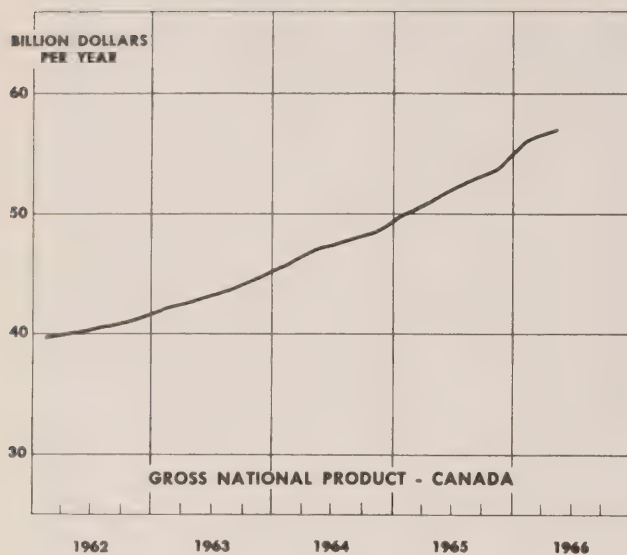
a second lecture characterizing the economic factors at work in the region in which the students live and showing how these factors determine the type and level of economic activity in the region.

Two presentations of this kind have now been made, one at Port Colborne and one at Kenora. It is hoped that within the next few weeks, the economists who prepared and gave the lectures, will be able to assess with the teachers the usefulness of the presentations.

In urging the need for widespread, simplified instruction in economics, ultimately because of the importance of his economic well-being to the individual and to society, it should be made clear that most economists are aware of the danger of economic values becoming paramount in our society. For this reason the pilot program being offered in the high schools includes an explicit statement of the fact that political, social or cultural well-being will not, in some magical way, emanate from the economic process. The economic process can provide material well-being and material well-being only. Anything else must be separately fostered. At the same time, every aspect of the individual's and the nation's life requires a basis of wealth and only the economic process can produce wealth. Students were therefore urged to formulate, as clearly as possible, an understanding of the relationship between the economic, political, social and cultural aspects of the individual's and the nation's life.

This idea should also accompany a course of simplified instruction in economics for adults. The non-economic is not strictly the concern of economics; but since economics touches the individual so closely and since such a course would be designed to implicate him consciously in the economic process, the economist has the responsibility to point out the limit, as well as the extent, of the usefulness of the economic process.

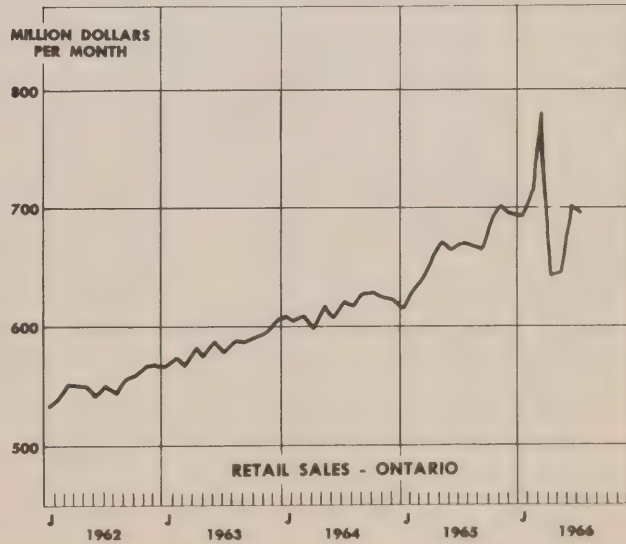
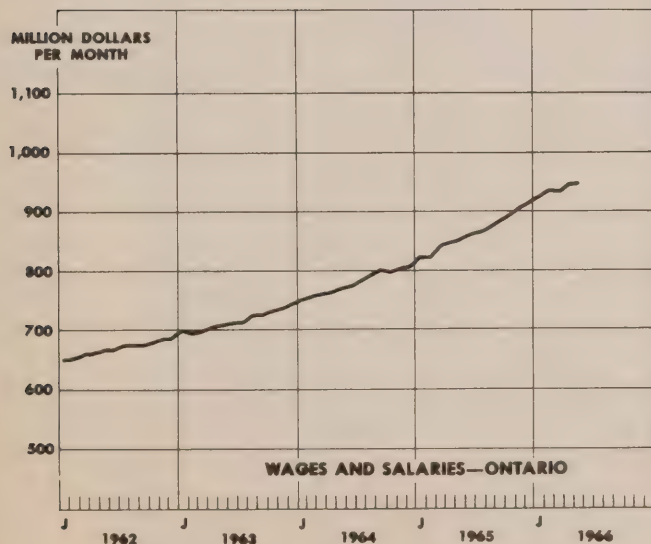
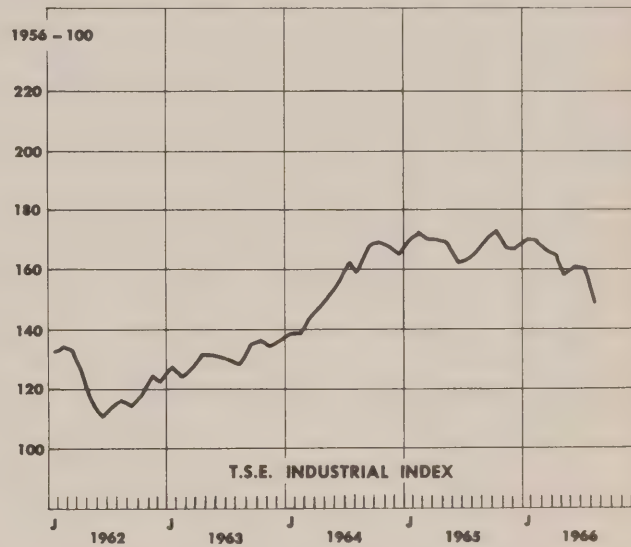
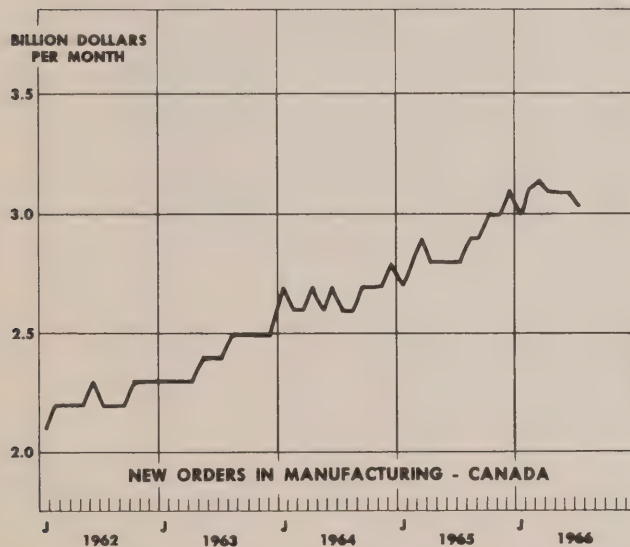
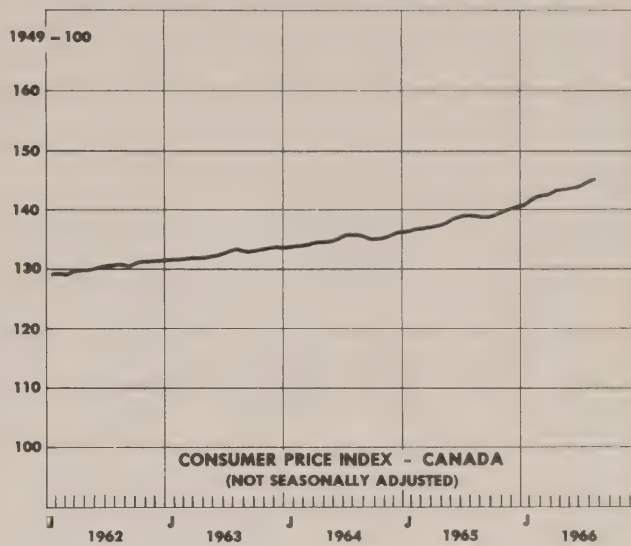
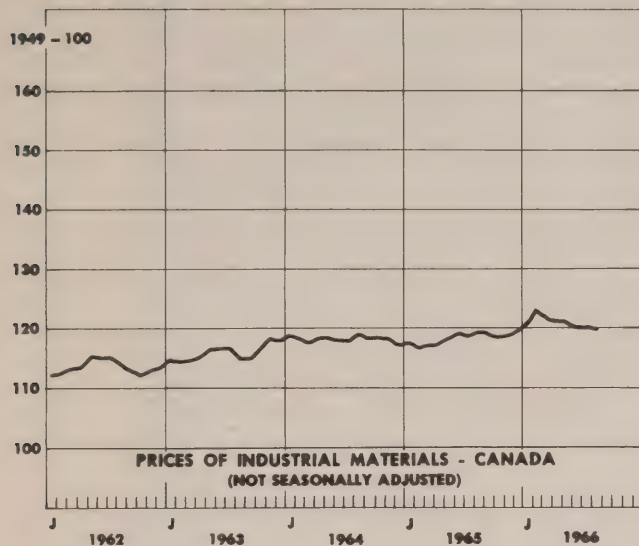
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



..... TREND CYCLE

———— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



ONTARIO ECONOMIC INDICATORS - SEASONALLY ADJUSTED
(* Figures for Canada)

LEADING INDICATORS															
	1965	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.
Average Weekly Hours Worked in Manufacturing		40.8	40.9	40.7	41.1	41.3	42.0	41.0	41.3	41.2					
New Dwelling Unit Starts		4,770	7,377	4,464	3,764	4,708	4,634	5,805	5,061	4,634	3,266	4,444	3,845	3,563	3,102
New Orders in Manufacturing*		2,849	2,909	2,897	3,005	3,014	3,103	2,996	3,123	3,141	3,092	3,088	3,086	3,030	
Housing Contracts		76.2	59.1	44.3	56.6	68.9	51.9	46.4	46.4	79.6	50.8	49.5	41.4	56.2	58.0
Business, Industrial and Engineering Contracts		127.8	115.0	155.7	98.1	87.6	125.8	101.8	162.8	218.2	109.4	143.0	99.0	116.4	151.7
Money Supply*		19,149	19,560	19,596	19,724	19,766	19,789	19,813	19,879	20,014	20,169	20,193	20,160	20,412	20,695
T.S.E. Industrial Index		163.9	166.8	171.4	174.2	167.7	168.1	171.2	169.8	167.1	164.9	158.6	161.7	160.5	148.6
COINCIDENTAL AND LAGGING INDICATORS															
New Dwelling Unit Completions		2,153	4,075	3,269	2,830	3,825	4,570	5,553	4,382	5,230	6,994	4,191	6,956	7,390	5,645
Average Hourly Earnings in Manufacturing		2.24	2.25	2.27	2.29	2.30	2.27	2.31	2.33	2.33					
Gross National Product*		-	-	52,704	-	-	53,760	-	-	56,112	-	-	57,008		
Cheques Cashied in Clearing Centres		4,184	4,634	4,287	4,313	4,363	4,526	4,687	4,476	4,518	4,596	4,450	4,481	4,511	
Retail Trade		672	669	667	694	703	697	695	715	780	646	647	701	696	
Labour Force		2,626	2,642	2,608	2,605	2,621	2,641	2,668	2,676	2,688	2,706	2,705	2,717	2,727	2,768
Employed		2,556	2,574	2,541	2,556	2,562	2,582	2,605	2,615	2,626	2,651	2,639	2,645	2,643	2,679
Unemployed		72	68	67	49	59	59	63	61	62	55	66	72	84	89
Unemployed as % of Labour Force		2.7	2.6	2.6	1.9	2.3	2.2	2.4	2.3	2.3	2.0	2.4	2.6	3.1	3.2
Wages and Salaries		868	874	888	895	908	917	924	937	936	946				
Industrial Employment		117.8	115.8	117.4	118.4	119.0	120.3	120.7	121.1	121.9	122.3				
Total Industrial Production*		254.9	258.2	260.2	261.6	264.0	268.6	268.9	271.5	273.8	274.1	274.0	273.5	271.4	
Total Manufacturing		231.3	232.8	233.7	237.1	237.6	242.5	243.3	244.6	246.8	247.2	245.5	245.2	245.1	
Non-Durables		225.2	226.3	227.1	230.2	229.1	234.7	235.5	236.8	240.4	240.3	239.7	240.0	241.0	
Durables		238.5	240.4	241.5	245.0	247.5	251.6	252.5	253.7	254.3	255.2	252.3	251.2	249.9	
Mining		360.7	373.9	383.7	362.2	377.8	385.0	372.7	387.1	390.4	393.5	397.8	393.8	378.6	
Electric Power and Gas Utilities		438.8	451.5	456.0	471.2	478.0	471.6	488.9	490.7	492.3	485.5	503.5	506.1	496.9	
Primary Energy Demand (Annual Rate)		42.59	43.67	44.51	44.98	46.11	45.50	46.71	46.60	46.88	46.62	48.61	48.57	47.18	48.45
ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED															
Domestic Exports*		770.4	685.6	701.0	772.2	898.0	796.7	722.9	674.5	768.7	753.2	910.0	834.5	737.8	2,281
Imports for Consumption*		732.3	660.5	724.7	763.6	895.3	786.9	706.9	667.9	830.8	775.1	914.0	899.2	2,315	2,606
Foreign Exchange Reserves*		2,492	2,598	2,614	2,644	2,681	2,665	2,562	2,548	2,510	2,469	2,412	2,342	2,342	
Prices, Industrial Materials*		259.5	260.9	260.4	259.3	259.4	261.3	265.4	267.9	264.6	264.7	264.2	263.0	262.4	
Business Failures		64	65	74	79	76	61	70	79	80	75	73	90	56	58
Business Failures - Liabilities		4.0	19.7	9.1	2.7	3.4	3.8	3.4	7.0	4.7	10.0	5.5	6.5	2.5	7.9

ONTARIO ECONOMIC REVIEW

DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

OFFICE OF THE CHIEF ECONOMIST

H. Ian Macdonald, Chief Economist

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CONTENTS

The Ontario Economy	1
The Distribution of Personal Income in Ontario and the Ten Economic Regions, <i>R. H. Frank</i>	3
Indicators and Charts	18

THE ONTARIO ECONOMY

From the movements of economic indicators in the past few months it has become quite apparent that economic growth has moderated from the very rapid pace of late 1965 and early 1966. Consistently high rates of growth have given way to either slower or erratic movements. Ontario's construction activity for one has been quite unsettled in relation to 1965, with contract awards rising considerably above last year's level in some months, falling behind in others. For example, construction contract awards were valued at \$183.7 million in September according to the *Southam Building Guide*, 16.6 per cent less than 12 months earlier; yet in October they were up to \$214.9 million, a full 35 per cent higher than October 1965. In September only industrial construction awards were up, but in October all categories except engineering were higher than a year ago.

One indicator which has been more consistent — unfortunately so — has been the number of housing starts in Ontario. Only during a few months of 1966 has it exceeded the corresponding 1965 number. During September, starts numbered 3,730 — down 21.2 per cent from 1965. But the picture brightened the following month as the number climbed to 4,520 dwelling units, one per cent more than October 1965. Increases in starts across many of Ontario's centres accounted for this improvement, although starts in Metropolitan Toronto remained well below the level of last year.

The lack of sustained growth has extended into industrial production as well. During the summer Canada's seasonally adjusted Index of Industrial Production was repeatedly lower than the April high of 274.1 (1949=100), but in August it finally rose to 274.4. This 1.3 per cent increase from July was the first gain since April, and was due principally to a 3.6 per cent rise in the mining component and a 3.5 per cent increase in electric power and gas utilities. Manufacturing rose too, but only by 0.6 per cent. Non-durables registered a gain of 0.2 per cent over the month, while durables, spurred by rising motor vehicle production, went up 1.0 per cent.

In spite of the slower progress of industrial production in recent months, the level of production still remains over six per cent higher than a year ago. This points out the very high rate growth prevalent at the end of 1965 and the beginning of 1966 — growth which was not at all sustainable.

Finance

Partly responsible for the present state of the economy — and undoubtedly to have a decided impact

in 1967 — is the fact that capital expenditures have for some time been increasing much more rapidly than have sales. (Conditions such as these indicate that capacity may be becoming excessive in relation to sustainable demand.) The result has been an inevitable depressing effect upon corporate profits and profit margins. This, in turn, has led corporations to depend more heavily on outside capital sources for their investment commitments.

Earlier in 1966, the federal government introduced policies to slow the overheating economy to a more sustainable growth rate. More recently it has become apparent that restraints must be relaxed, especially with respect to money and credit, in order to avoid an unnecessary slowdown in the economy.

While tight money conditions continue to be much in evidence, the new high levels of money and banking indicators imply that the urgency of this condition has been discounted and that interest rates are unlikely to rise further. With current bank statistics largely influenced by seasonal factors, bank notes in circulation, savings deposits, bank loans and the total "money supply" are at the highest levels ever attained.

Note circulation of the Bank of Canada has increased, in the week ending November 2nd, to a record \$2,606.6 million. This is the third consecutive year in which circulation has set a new high. Note circulation generally increases further in December, and with last year's expansion to year-end exceeding \$70 million, 1966's year-end peak will likely be in excess of \$2,700 million. The annual increase in note circulation has continued for many years, with the annual peaks between 1952 and 1965 advancing from \$1,564 million to \$2,564 million. This expansion reflects the fact that more currency is needed for a growing population with increasing discretionary spending income at its disposal. This need would have been much greater but for the growing use of bank cheques to pay bills, and the proliferation of credit cards.

Savings deposits at chartered banks, at November 2nd, were also at a record \$10,524 million level, representing an increase of \$651 million or 6.6 per cent over last year. Savings deposits similarly have posted steady increases for many years. Gains have tended to be generally regular with the usual exceptions of May, on account of moving and furniture expenditures, and November, when savings are withdrawn to subscribe to Canada Savings Bonds.

General loans of the chartered banks — a category comprising business loans, personal loans and loans to farmers and institutions — increased by \$53 million in the week of November 2nd, rising to a new

record high of \$10,237 million. These were \$698 million or 7.3 per cent above the level of a year ago. "Total loans", which comprise general loans plus loans to provinces, municipalities, grain dealers and instalment companies, also attained a new high at \$11,609 million, up \$861 million or 8.0 per cent above the level of a year ago.

The expansion of Canada's money supply, consisting of chartered bank deposits plus currency (notes and coin) held outside banks, has been particularly noteworthy. The increase for the week of November 2nd was \$128 million, bringing the total to \$21,124 million — \$1,347 million or 6.8 per cent over the position a year ago. Further year-end increases in the money supply are to be anticipated as business requirements for increased liquidity rise to meet the increase in trade just prior to Christmas.

An expanding money supply usually is conducive to declining interest rates; yet this year rates have been rising. The extension of tight-money conditions thus might well be attributable not only to the absence of imported capital but to a decided reduction in the velocity at which money changes hands — a factor influenced to some extent by the collapse of Atlantic Acceptance.

This year's rise in interest rates, however, could be only partly due to these two foregoing considerations. It remains quite clear that the Canadian economy continues to be closely bound to major U.S. developments. High interest rates — Canada's highest in about forty years — have thus been attained to some extent in response to recent increases in U.S. rates. This has added to the burden on local capital markets as would-be Canadian borrowers in U.S. markets have been obliged to seek their capital accommodation through domestic channels.

High interest rates have also directed numerous prospective borrowers, at all levels, to postpone or curtail new capital financing programs. For the first 10 months of 1966, total sales of new Canadian government, provincial, municipal and corporate bonds, with a maturity of more than two years, were down 7.7 per cent to a value of \$3.27 billion from 1965's volume of new financings. In contrast, for the first five months of this year — just prior to the emergence of higher interest rates — new financings, at \$1.83 billion, were running almost two per cent above the previous year. The proportion of new issues payable in U.S. funds has declined noticeably; at a value of \$694 million, they represent only 21.3 per cent of all borrowings and are some 12.7 per cent below last year's corresponding total. Over 60 per cent of total U.S. pay issues were negotiated during

the first five months of the year.

Total bond financings during the first 10 months of 1966 were distributed as follows: Canadian direct and guaranteed bonds, \$625 million; provincial issues, \$1.05 billion; Ontario municipalities, \$148 million; Quebec and Maritime municipalities, \$207 million; Western municipalities, \$38 million; and new corporate bond floatations, \$1.20 billion.

The borrowing needs of Canada's federal and provincial governments could impose an additional net new demand of more than \$300 million on the bond and money markets before their current fiscal year ends on March 31, 1967. Coupled with continuing tight money and high demand from corporate and municipal borrowers, the markets are being squeezed more severely than at any time in the last 40 to 50 years. The only apparent federal requirement is for \$450 million to redeem two issues maturing on December 15th. As this amount will be "rolled over" it does not constitute net new demand, so all of the net new demand will be generated by the provinces. Based on budgetary estimates, the provinces require \$1.2 billion to \$1.4 billion in new capital this current fiscal year. Of that total, about \$330 million is required to redeem maturing issues, leaving a net new demand of about \$1 billion. In the period from April 1st through October 31st, or for the first 7 months of this fiscal year, the provinces have raised just over \$750 million in gross new issues. This leaves about \$500 million still to be raised. Some of the demand may be met from provincial shares of Canada Pension Plan funds. An estimated \$380 million of CPP funds will be available to nine provinces in this fiscal year. Quebec, which administers its own pension plan, expects to have some \$200 million available for investment.

The activity of investors in the equity markets illustrates their uncertainty about continued high economic growth after the end of 1966. The decidedly lower prices since the all-time high in mid-January have made it increasingly apparent that high interest rates have diverted considerable amounts of money from the equity market to bonds and other loan media. A number of institutions, like mutual funds, have further temporized by building up their cash positions in anticipation of being able to acquire equities at lower prices. The position of these investors has been bolstered by the inability of the stock market to initiate any convincing recovery. Nevertheless, as the economy moderates its pace, lessening the demand for money and consequently making funds more readily available at lower rates, the prospect of a sustained rally from current levels would likely serve to direct temporizing potential buyers back into the market.

THE DISTRIBUTION OF PERSONAL INCOME IN ONTARIO AND THE TEN ECONOMIC REGIONS

R. H. FRANK

Econometrician, Applied Economics Branch

ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

In Ontario, just as in other provinces, there are appreciable regional differences in income distribution. Knowledge of such variations is important as personal income represents one of the major determinants of economic activity. Information on income distribution serves many purposes, particularly in areas such as market research, economic planning and the formulation of government policies.

Although fairly extensive raw data on the frequency distribution of personal income have been made available by the Dominion Bureau of Statistics and the Department of National Revenue, a number of difficulties have thus far prevented their integration into a systematic study of interregional differences. Among these are the heterogeneity of the statistics and the conceptual problems in defining income and the income recipient unit. As a result interpretative analysis in the past has been largely confined to national data.

The present pilot study on the frequency distribution of personal income by economic regions and component sub-areas was initiated by the Applied Economics Branch as part of a continuing econometric program⁽¹⁾ to provide detailed quantitative analysis of major sectors of the Ontario economy.

The primary objectives of this study are to examine the analytical significance of available statistics, to develop income distribution data on a regional and sub-regional basis, and to evaluate the shifts occurring over time in the relative inequality of income in Ontario.⁽²⁾

The first section of the report examines in some detail the body of currently available data, their relative merits and the underlying conceptual prob-

lems in describing the size distribution of personal income. It also contains a brief outline of the adopted estimation procedures and the derived tabulations by economic regions, counties and districts for the period from 1960 to 1963.

The second part analyses the structural characteristics of the empirical income pattern on a quantitative basis in terms of the Pareto and log-normal distribution and develops measures of relative income inequality on a regional basis.

The last section evaluates briefly, in tentative form, the regional pattern of Ontario's income distribution and derives data on average income per capita for the 10 economic regions and their component sub-areas.

Basic tables relating to Ontario and the economic regions accompany the text while supplementary tabulations for counties and districts are presented in the appendixes.

Estimation of Income Distribution

In line with accepted terminology *income distribution is defined as the absolute or relative frequency of income recipient units by income class*. The frequency distribution of personal income depends on the concept of income adopted and the definition of the income recipient unit used.

Thus from the point of view of data collection there is the problem of definition of the recipient unit: it may be either the individual or a composite such as the family or household. The income concept to be used should include not only current money income, wages in kind and welfare or transfer payments, but also the imputed benefits derived from the direct use of property and self-produced goods.

The two basic sources of comprehensive income statistics in Canada are the decennial census conducted by the Dominion Bureau of Statistics and the income tax statistics compiled by the Department of National Revenue. Whereas the census has adopted

⁽¹⁾ See R. H. Frank's earlier article "A Pilot Study on Regional Labour Income in Ontario," *Ontario Economic Review*, November, 1964.

⁽²⁾ The author acknowledges with appreciation the contribution of Miss D. Gerkis, economist with the Applied Economics Branch, in assisting with the preliminary research and carrying out the extensive computational work for this project.

the family as the primary reporting unit, taxation statistics are based on personal income tax returns, thus providing detailed information on the universe of individual income recipients.

The recently published Bulletin SX-5, "Incomes of Individuals", a supplement to the 1961 Census of Canada, is not based on a complete enumeration but on a sample survey, and excludes farm and investment income. Coverage is confined to members of the active labour force, thus eliminating the income of retired people as well as transfer and welfare payments. As a result the survey is not fully comparable to the main body of census income data or taxation statistics. Although limited to the size distribution of non-farm employment income, the survey data provide strong evidence supporting our findings derived from taxation statistics.

Although for certain analytical purposes income distribution data on a composite recipient unit basis are preferable, the value of such tabulations is greatly reduced if not supplemented by a size distribution of the adopted unit and a specification of the number of multiple income units. As both qualifications are only partially met under the present census set-up, the distributional pattern obtainable from taxation statistics represents invaluable complementary information.

In terms of the income concept used, the two statistical sources are with the exceptions already noted virtually identical. Both compilations exhibit similar deficiencies in the coverage of imputed and farm income.

However, while the census data are to a large extent subject to bias due to non-reporting and intentional or unintentional errors of response without the compensating effect of punitive action or threat, income tax returns must be corroborated by tangible evidence and are closely scrutinized by the taxation authorities. They therefore appear to be a more reliable source for income estimation.

An additional factor of considerable significance in favour of taxation statistics is the fact that census statistics are available only every 10 years while income tax data are compiled on an annual basis. This provides unmatched continuity of record — indispensable for economic analysis. In view of these considerations it was decided to use taxation statistics to derive estimates of the income distribution for Ontario, the constituent economic regions and their component sub-areas. The Department of National Revenue publishes in *Taxation Statistics* annual data on the number of taxable and non-taxable

personal income tax returns by income class on a county or census division basis. Continuity of record has existed since 1960 when the currently used delineation of income classes and reporting procedures were first introduced.

These statistics are compiled from a sample of income tax returns filed by individuals during the taxation year. While a straight 10 per cent sample was used prior to 1957, a more complex stratified sample was subsequently introduced. As a result the precision of the estimates has been greatly improved.

On the basis of this conceptual background, the income distribution for Ontario, the 10 economic regions and their constituent sub-areas was estimated for seven continuous income classes for the period from 1960 to 1963 by aggregating taxable and non-taxable returns for each income class. Reviewing the total number of income tax returns filed annually, it is apparent that a relatively large portion falls in the non-taxable category, representing on average approximately one-fifth of all returns.

	No. of Taxable Returns	No. of Non-Taxable Returns	Total	Non-Taxable as % of Total
1960	1,850,428	482,538	2,332,966	20.7
1961	1,886,702	485,700	2,372,402	20.5
1962	1,943,215	478,345	2,421,560	19.8
1963	2,044,518	468,324	2,512,842	18.6

About 98 per cent of the non-taxable returns relate to income under \$4,000, with the income group up to \$2,000 accounting for 75 per cent. The class intervals \$2,000 to \$3,000 and \$3,000 to \$4,000 represent some 17 per cent and six per cent respectively.

The resultant distributional pattern for Ontario and the 10 economic regions during the period under review is presented in Table I. A comparable and more detailed breakdown on a county and district basis is shown in Appendix A, page 10.

The high proportion of income recipients at the lower end of the income scale is in agreement with the findings of similar studies carried out in the United States, the United Kingdom and other countries.

The marked skewness of Canada's income distribution at the national and provincial level is statistically confirmed by a series of occasional, special surveys conducted by the Dominion Bureau of Statistics in the 1950's and early 1960's. Although the relevant sample surveys exclude the important farm income component, they show a heavy concentration of income recipients in the lower income classes compatible with the findings of the present study.

TABLE I
FREQUENCY DISTRIBUTION OF PERSONAL INCOME
BY ECONOMIC REGIONS, 1960-1963
(Per cent of total income recipients)

Income Class \$	Metro- politan	Niagara	Eastern Ontario	North- eastern Ontario	Lake St. Clair	Lake Erie	Mid- Western Ontario	Lake Ontario	Lakehead- North- western Ontario	Georgian Bay	Ontario
1960											
under 1,999	23.2	24.9	28.0	24.9	28.9	29.2	29.5	31.6	26.3	37.1	26.1
2,000 - 2,999	19.7	17.2	20.2	15.2	17.2	22.0	20.9	19.7	16.7	22.0	19.1
3,000 - 3,999	19.5	17.8	18.9	16.5	16.5	20.1	20.2	19.3	18.3	19.7	18.9
4,000 - 4,999	15.4	17.5	14.3	17.9	16.2	13.0	15.1	14.0	16.5	10.4	15.4
5,000 - 5,999	8.8	10.9	7.5	12.9	9.3	6.2	6.5	6.9	10.5	4.6	8.8
6,000 - 9,999	9.8	9.5	8.2	11.0	9.8	7.0	5.6	6.7	9.7	4.6	8.9
10,000 and over	3.6	2.2	2.9	1.6	2.1	2.5	2.2	1.8	2.0	1.6	2.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1961											
under 1,999	22.4	25.1	27.4	26.0	29.7	28.3	29.4	30.9	26.4	35.6	25.7
2,000 - 2,999	18.7	16.8	18.8	14.2	17.0	21.3	21.1	18.1	16.8	21.7	18.4
3,000 - 3,999	18.5	16.5	18.0	15.5	15.2	19.4	19.1	18.7	15.5	19.1	17.8
4,000 - 4,999	16.1	16.9	14.5	16.9	15.9	13.6	14.5	15.1	17.4	10.9	15.6
5,000 - 5,999	9.5	11.2	7.8	13.3	9.5	6.8	7.1	8.2	11.3	5.5	9.4
6,000 - 9,999	10.8	10.9	10.1	12.2	10.2	7.9	6.5	7.1	10.8	5.6	10.0
10,000 and over	4.0	2.6	3.4	1.9	2.5	2.7	2.3	1.9	1.8	1.6	3.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962											
under 1,999	20.6	23.2	25.9	24.9	27.6	27.5	27.2	28.7	26.0	34.6	24.1
2,000 - 2,999	17.7	16.4	18.9	14.3	16.3	19.6	19.7	18.2	15.2	20.2	17.7
3,000 - 3,999	18.4	15.4	18.2	15.6	14.9	18.8	19.5	18.7	17.2	19.2	17.7
4,000 - 4,999	15.5	15.8	14.2	16.3	16.3	14.5	15.2	13.5	17.1	11.5	15.2
5,000 - 5,999	10.8	12.5	8.2	13.3	10.1	8.2	8.5	9.4	10.1	6.0	10.3
6,000 - 9,999	12.5	13.8	10.6	13.6	11.9	8.8	7.5	9.3	12.5	6.7	11.6
10,000 and over	4.5	2.9	4.0	2.0	2.9	2.6	2.4	2.2	1.9	1.8	3.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1963											
under 1,999	21.3	22.9	26.2	25.8	27.0	27.5	26.6	28.9	25.7	34.7	24.3
2,000 - 2,999	16.7	16.4	17.0	14.2	16.3	19.5	19.8	17.2	16.3	19.7	17.0
3,000 - 3,999	17.6	14.8	17.3	14.7	13.8	18.0	18.4	17.5	15.0	18.3	16.8
4,000 - 4,999	15.3	15.5	14.8	15.7	13.6	14.5	15.0	13.9	16.5	12.2	15.0
5,000 - 5,999	10.8	13.1	9.5	13.2	11.9	8.2	9.0	10.1	12.0	6.4	10.8
6,000 - 9,999	13.5	14.1	11.1	14.3	14.3	9.4	8.5	10.2	12.5	6.9	12.4
10,000 and over	4.8	3.2	4.1	2.1	3.1	2.9	2.7	2.2	2.0	1.8	3.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Income Class	1955 DBS Survey	SX-5 1961 DBS Survey	1961 Taxation Statistics
\$	(Per cent of total income recipients)		
under 1,999	26.4	24.0	25.7
2,000 - 3,999	36.3	36.9	36.2
4,000 - 4,999	15.1	16.2	15.6

Supplementary data from the census and other sources suggest that the high percentage of low income recipients is largely accounted for by (a) farm income in depressed rural areas, (b) the fluctuating number of part-year income earners who, in many instances, do not belong to the regular labour force, (c) the low income of retired people whose current earnings supplement planned drawings of accumulated savings, (d) the modest level of earnings of young persons first entering the labour market, and (e) the under-valuation of imputed earnings.

Econometric Analysis of the Empirical Income Distribution

The pronounced skewness of empirical frequency distributions of personal income has led to the development of a variety of income distribution models designed to measure and to interpret the degree of inequality of observed income levels. The selection of a particular mathematical formulation of the distributional pattern is dependent on the economic significance that can be attached to its parameters and the degree to which the fitted function approximates the data.

While recent econometric studies suggest that income flows originating from different sources such as labour income and professional and entrepreneurial revenue generate widely varying distribution patterns, aggregate income data appear to be most adequately graduated by the well-known Pareto function and the log-normal probability distribution.

Pareto, in studying the data concerning incomes in various countries at different periods, found that the logarithm of the percentage of units with an income in excess of some given value is a negatively sloped linear function of the logarithm of that value:

$$Y = A X^{-a} \quad \dots (1)$$

where Y is the percentage of recipient units with an income in excess of X. Taking logarithms, equation (1) can be converted to the derived linear expression

$$\log Y = \log A - a \log X \quad \dots (2)$$

which is susceptible to parametric estimation.

While equation (1) is based on a cumulative distribution, the corresponding density function expressing relative frequency for any given class interval is given by

$$P(Y) = a A X^{-(a+1)} \quad \dots (3)$$

which represents the first derivative of the primary function (1). The value of the parameter a can be regarded as a relative measure of the inequality of the income distribution. The larger the value of the coefficient a , the more concave the hyperbola of the distribution curve and the greater the difference in the number of units allocated to the various income classes. Empirical studies show that the magnitude of the parameter a varies within the limits of 1.2 to 2.4, exhibiting considerably greater variability at the regional level.

I: PARETO FUNCTIONS FOR INCOME LEVELS OVER \$2,000, BASED ON SIX CLASS INTERVALS

1963		1960	
Equation	R ²	Equation	R ²
$Y_c = \frac{369 (10^6)}{X^{1.9367}}$	0.9224	$\frac{154 (10^7)}{X^{2.1262}}$	0.9945
$Y_o = \frac{242 (10^6)}{X^{1.8804}}$	0.9139	$\frac{105 (10^7)}{X^{2.0745}}$	0.9386
$Y_1 = \frac{863 (10^5)}{X^{1.7498}}$	0.9208	$\frac{366 (10^6)}{X^{1.9417}}$	0.9454
$Y_2 = \frac{496 (10^6)}{X^{1.9647}}$	0.8809	$\frac{328 (10^7)}{X^{2.2114}}$	0.9113
$Y_3 = \frac{156 (10^6)}{X^{1.8284}}$	0.9323	$\frac{939 (10^6)}{X^{2.0651}}$	0.9511
$Y_4 = \frac{235 (10^7)}{X^{2.1559}}$	0.8535	$\frac{117 (10^8)}{X^{2.3629}}$	0.8725
$Y_5 = \frac{391 (10^6)}{X^{1.9349}}$	0.8779	$\frac{332 (10^7)}{X^{2.2129}}$	0.9093
$Y_6 = \frac{732 (10^6)}{X^{2.0292}}$	0.9391	$\frac{163 (10^7)}{X^{2.1416}}$	0.9636
$Y_7 = \frac{120 (10^7)}{X^{2.0924}}$	0.9397	$\frac{348 (10^7)}{X^{2.2382}}$	0.9600
$Y_8 = \frac{221 (10^7)}{X^{2.1617}}$	0.9086	$\frac{719 (10^7)}{X^{2.3239}}$	0.9454
$Y_9 = \frac{363 (10^7)}{X^{2.2160}}$	0.8727	$\frac{422 (10^7)}{X^{2.2423}}$	0.9072
$Y_{10} = \frac{510 (10^7)}{X^{2.2813}}$	0.9466	$\frac{806 (10^7)}{X^{2.3540}}$	0.9736

II: PARETO FUNCTION (CANADA, 1963) FOR INCOME LEVELS OVER \$6,000, BASED ON 14 CLASS INTERVALS

$$Y_c = \frac{51.599 (10^{10})}{X^{2.5822}} \quad R^2 = 0.9992$$

III: LOG-NORMAL DISTRIBUTION (CANADA, 1963) FOR THE INCOME RANGE \$1,000 TO \$6,000

$$a_1 = 1.1525 \quad R^2 = 0.9959$$

Symbols:

- X = income level
- Y_n = percentage of income recipients with income in excess of X
- n = 0, 1, 2 10 and c
- o = Ontario
- 1 = Metropolitan
- 2 = Niagara
- 3 = Eastern Ontario
- 4 = Northeastern Ontario
- 5 = Lake St. Clair
- 6 = Lake Erie
- 7 = Mid-Western Ontario
- 8 = Lake Ontario
- 9 = Lakehead-Northwestern Ontario
- 10 = Georgian Bay
- c = Canada

NOTE: The extremely close fit of the model to the data is illustrated by the high coefficients of determination (R^2) which range from 0.999 to 0.854, with the result that the differences between actual and predicted values are very small.

As the parameter $-a$ in equation (2) is equivalent to the slope of the distribution curve after conversion to a straight line on a double-logarithmic scale, the coefficient a can also be interpreted as the elasticity of the relative number of income recipients with respect to the various income class limits:

$$-\frac{d \log Y}{d \log X} = a \dots\dots\dots (4)$$

In other words a expresses the relative decrease in the number of units within successively higher income classes.

In order to determine the structural properties of the income distribution in Ontario and the constituent economic regions, the Pareto function (1) was statistically derived for the empirical data pre-

sented in the first section of this study. The respective equations for the initial and terminal years of the time series are presented on page 6, while the values of the parameter a are summarized in the accompanying synopsis:

	1963	1960
	Parameter a	
Metropolitan	1.7498	1.9417
Niagara	1.9647	2.2114
Eastern Ontario	1.8284	2.0651
Northeastern Ontario	2.1559	2.3629
Lake St. Clair	1.9349	2.2129
Lake Erie	2.0292	2.1416
Mid-Western Ontario	2.0924	2.2382
Lake Ontario	2.1617	2.3239
Lakehead-Northwestern Ontario	2.2160	2.2423
Georgian Bay	2.2813	2.3540
Ontario	1.8804	2.0745
Canada	1.9367	2.1262

As is to be expected on the basis of the observed data, the magnitude of the parameter a is in general relatively large but has decreased during the period under review, reflecting the increasing tendency toward a more equitable income distribution. In both years income appears to be more equitably distributed in Ontario than in Canada as a whole, while the Georgian Bay, Northwestern, Northeastern and Lake Ontario regions exhibit a comparatively high degree of income inequality.

Although the statistical correlation of income class and the number of recipient units averaged 93 per cent under the assumption of the Pareto hypothesis, theoretical considerations as well as empirical studies suggest that the overall graduation of the observational data could have been appreciably improved by the application of the log-normal probability density to the lower income range and confining the Pareto function to the upper tail of the income distribution.

While the restriction of available data to seven income classes at the provincial and sub-provincial level made it impossible to fit both distributions simultaneously to the data, the suggested hypothesis was successfully tested for Canada's overall income distribution for which a detailed breakdown into 48 income classes is supplied by the Department of National Revenue. Detailed results of the relevant tests are presented on this page, showing that the Pareto function graduates the national data above the \$6,000 level with an accuracy of virtually 100 per cent, whereas the log-normal probability distribution for the lower income classes explains some 99 per cent of the apparent variation.

TABLE II
INCOME DISTRIBUTION BY INCOME CLASS, 1960-1963
ECONOMIC REGIONS AND PROVINCE
(Per cent of total income recipients)

Income Class \$	METROPOLITAN REGION				NIAGARA REGION				EASTERN ONTARIO REGION			
	1960	1961	1962	1963	1960	1961	1962	1963	1960	1961	1962	1963
under 1,999	23.2	22.4	20.6	21.3	24.9	25.1	23.2	22.9	28.0	27.4	25.9	26.2
2,000 - 2,999	19.7	18.7	17.7	16.7	17.2	16.8	16.4	16.4	20.2	18.8	18.9	17.0
3,000 - 3,999	19.5	18.5	18.4	17.6	17.8	16.5	15.4	14.8	18.9	18.0	18.2	17.3
4,000 - 4,999	15.4	16.1	15.5	15.3	17.5	16.9	15.8	15.5	14.3	14.5	14.2	14.8
5,000 - 5,999	8.8	9.5	10.8	10.8	10.9	11.2	12.5	13.1	7.5	7.8	8.2	9.5
6,000 - 9,999	9.8	10.8	12.5	13.5	9.5	10.9	13.8	14.1	8.2	10.1	10.6	11.1
10,000 and over	3.6	4.0	4.5	4.8	2.2	2.6	2.9	3.2	2.9	3.4	4.0	4.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Income Class \$	NORTHEASTERN ONTARIO REGION				LAKE ST. CLAIR REGION				LAKE ERIE REGION			
	1960	1961	1962	1963	1960	1961	1962	1963	1960	1961	1962	1963
under 1,999	24.9	26.0	24.9	25.8	28.9	29.7	27.6	27.0	29.2	28.3	27.5	27.5
2,000 - 2,999	15.2	14.2	14.3	14.2	17.2	17.0	16.3	16.3	22.0	21.3	19.6	19.5
3,000 - 3,999	16.5	15.5	15.6	14.7	16.5	15.2	14.9	13.8	20.1	19.4	18.8	18.0
4,000 - 4,999	17.9	16.9	16.3	15.7	16.2	15.9	16.3	13.6	13.0	13.6	14.5	14.5
5,000 - 5,999	12.9	13.3	13.3	13.2	9.3	9.5	10.1	11.9	6.2	6.8	8.2	8.2
6,000 - 9,999	11.0	12.2	13.6	14.3	9.8	10.2	11.9	14.3	7.0	7.9	8.8	9.4
10,000 and over	1.6	1.9	2.0	2.1	2.1	2.5	2.9	3.1	2.5	2.7	2.6	2.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Income Class \$	MID-WESTERN ONTARIO REGION				LAKE ONTARIO REGION				LAKEHEAD-NORTHWESTERN ONTARIO REGION			
	1960	1961	1962	1963	1960	1961	1962	1963	1960	1961	1962	1963
under 1,999	29.5	29.4	27.2	26.6	31.6	30.9	28.7	28.9	26.3	26.4	26.0	25.7
2,000 - 2,999	20.9	21.1	19.7	19.8	19.7	18.1	18.2	17.2	16.7	16.8	15.2	16.3
3,000 - 3,999	20.2	19.1	19.5	18.4	19.3	19.7	18.7	17.5	18.3	15.5	17.2	15.0
4,000 - 4,999	15.1	14.5	15.2	15.0	14.0	15.1	13.5	13.9	16.5	17.4	17.1	16.5
5,000 - 5,999	6.5	7.1	8.5	9.0	6.9	8.2	9.4	10.1	10.5	11.3	10.1	12.0
6,000 - 9,999	5.6	6.5	7.5	8.5	6.7	7.1	9.3	10.2	9.7	10.8	12.5	12.5
10,000 and over	2.2	2.3	2.4	2.7	1.8	1.9	2.2	2.2	2.0	1.8	1.8	2.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Income Class \$	GEORGIAN BAY REGION				ONTARIO			
	1960	1961	1962	1963	1960	1961	1962	1963
under 1,999	37.1	35.6	34.6	34.7	26.1	25.7	24.1	24.3
2,000 - 2,999	22.0	21.7	20.2	19.7	19.1	18.4	17.7	17.0
3,000 - 3,999	19.7	19.1	19.2	18.3	18.9	17.8	17.7	16.8
4,000 - 4,999	10.4	10.9	11.5	12.2	15.4	15.6	15.2	15.0
5,000 - 5,999	4.6	5.5	6.0	6.4	8.8	9.4	10.3	10.8
6,000 - 9,999	4.6	5.6	6.7	6.9	8.9	10.0	11.6	12.4
10,000 and over	1.6	1.6	1.8	1.8	2.8	3.1	3.4	3.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

It is hoped that close cooperation between the recently established Ontario Statistical Centre and the Department of National Revenue will result in a more detailed breakdown of income data from taxation statistics, facilitating a more refined analysis of Ontario's income distribution.

The Regional Pattern of Ontario's Income Distribution

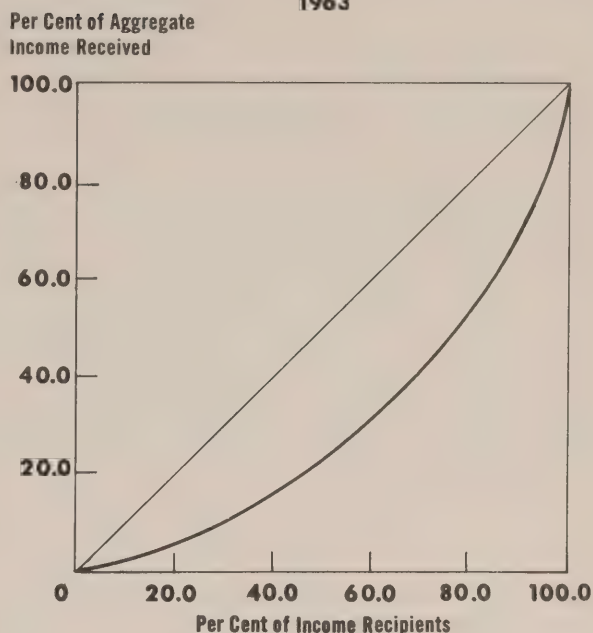
Reviewing the period from 1960 to 1963, it is apparent that Ontario's income distribution exhibits considerable regional variation. While for the province as a whole the group of people receiving less than \$2,000 per annum averaged about 25 per cent of the total number of income recipients, this percentage has been consistently higher in the Georgian Bay, Lake Ontario, Lake Erie, Lake St. Clair, Mid-Western and Eastern Ontario regions. This pattern reflects marked differences in employment and wage levels, the degree of industrial development, and in some instances, the existence of depressed rural areas.

Similar variations are encountered at the sub-regional level as shown in Appendix A, presenting detailed information for Ontario's income distribution on a county and district basis.

It should be noted, however, that during the period under review the relative number of recipients in the lower income classes up to \$4,000 has steadily declined, reflecting not only rising wage levels but an increasing tendency toward a more equitable distribution of personal income. The gradual shift in the composition of the regional income distribution over time is shown in Table II.

Despite the favourable overall trend there still remains a considerable degree of socially undesirable inequality in Ontario's income distribution. This is readily seen in the accompanying Lorenz diagram which shows the percentage of income recipients in each income class along the abscissa and the proportion of total income accruing to each class on the ordinate.

LORENZ DIAGRAM
INCOME DISTRIBUTION, ONTARIO
1963



The points plotted for the various corresponding values trace out a curve below the 45° line sloping upward to the right from the origin of the coordinate axes. *The deviation of the empirical curve from the diagonal of perfectly equitable distribution reveals the degree of existing inequality.*

The varying degree of prosperity or depression at the regional and sub-regional level is equally well reflected in the data for average income received during the period under review, summarized in Appendix B, page 17.

While a detailed analysis of the statistical material presented in this section is beyond the scope of this study, the availability of these data will in the future greatly facilitate econometric studies and the formulation of regional development policies.

APPENDIX A

INCOME DISTRIBUTION BY ECONOMIC REGIONS, COUNTIES AND DISTRICTS, 1960-1963 (Per cent of total income recipients)

Income Class \$	METROPOLITAN					NIAGARA					
	Halton	Ontario	Peel	York	Region	A — Burlington		B — Niagara			Region
						Brant	Wentworth	Haldimand	Lincoln	Welland	
1960											
under 1,999	19.6	21.5	22.3	23.4	23.2	29.0	22.4	34.3	26.5	26.8	24.9
2,000 - 2,999	18.1	15.1	15.8	20.2	19.7	20.5	16.9	18.8	16.5	16.3	17.2
3,000 - 3,999	17.1	17.9	16.2	19.9	19.5	21.7	18.0	20.4	16.7	15.9	17.8
4,000 - 4,999	16.6	21.7	15.9	14.9	15.4	14.4	17.0	13.5	19.6	19.2	17.5
5,000 - 5,999	10.1	12.6	10.0	8.5	8.8	6.4	12.1	6.8	10.2	11.2	10.9
6,000 - 9,999	14.5	9.4	15.0	9.5	9.8	5.8	11.1	4.7	8.0	9.1	9.5
10,000 and over	4.0	1.8	4.8	3.6	3.6	2.2	2.5	1.5	2.5	1.5	2.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1961											
under 1,999	20.8	21.4	19.0	22.7	22.4	27.8	22.9	30.3	27.1	27.3	25.1
2,000 - 2,999	15.9	15.8	15.4	19.1	18.7	20.2	16.4	17.3	16.6	15.9	16.8
3,000 - 3,999	17.7	17.8	17.0	18.7	18.5	19.9	17.2	20.5	14.3	14.1	16.5
4,000 - 4,999	15.6	21.5	16.4	15.7	16.1	15.9	15.9	16.3	19.6	18.0	16.9
5,000 - 5,999	12.3	12.0	11.0	9.2	9.5	7.8	12.3	8.2	10.1	11.4	11.2
6,000 - 9,999	14.0	9.8	15.7	10.5	10.8	6.0	12.4	6.1	9.7	11.1	10.9
10,000 and over	3.7	1.7	5.5	4.1	4.0	2.4	2.9	1.3	2.6	2.2	2.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962											
under 1,999	21.7	21.2	19.0	20.6	20.6	27.9	20.8	31.7	23.3	25.8	23.2
2,000 - 2,999	14.8	14.3	15.1	18.2	17.7	20.0	15.9	19.1	16.0	15.9	16.4
3,000 - 3,999	14.7	14.0	15.1	19.1	18.4	17.6	15.4	17.7	14.8	14.7	15.4
4,000 - 4,999	15.1	16.2	15.2	15.5	15.5	16.2	15.0	15.3	16.5	16.9	15.8
5,000 - 5,999	11.0	17.0	12.1	10.3	10.8	9.2	13.5	8.0	13.0	11.9	12.5
6,000 - 9,999	16.9	15.1	16.9	11.9	12.5	6.9	16.1	6.5	13.6	12.5	13.8
10,000 and over	5.8	2.2	6.6	4.4	4.5	2.2	3.3	1.7	2.8	2.3	2.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1963											
under 1,999	20.5	21.5	20.5	21.3	21.3	25.3	20.9	33.7	22.0	26.3	22.9
2,000 - 2,999	13.9	12.7	13.3	17.2	16.7	19.5	15.6	20.1	15.8	16.4	16.4
3,000 - 3,999	14.3	13.5	14.5	18.2	17.6	17.6	14.7	17.9	14.2	13.7	14.8
4,000 - 4,999	15.2	14.4	14.4	15.4	15.3	16.5	14.9	14.6	16.6	15.9	15.5
5,000 - 5,999	11.8	16.5	12.2	10.3	10.8	10.5	14.2	6.3	13.3	12.6	13.1
6,000 - 9,999	18.1	19.0	19.1	12.7	13.5	7.9	16.1	5.9	14.9	12.9	14.1
10,000 and over	6.2	2.4	6.0	4.9	4.8	2.7	3.6	1.5	3.2	2.2	3.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

INCOME DISTRIBUTION BY ECONOMIC REGIONS,
COUNTIES AND DISTRICTS, 1960-1963
(Per cent of total income recipients)

Income Class \$	EASTERN ONTARIO											
	A — Ottawa Valley					B — Upper St. Lawrence						
	Carleton	Lanark	Prescott	Renfrew	Russell	Dundas	Frontenac	Glengarry	Grenville	Leeds	Stormont	Region
1960												
under 1,999	23.7	32.4	36.4	33.4	38.7	36.4	31.9	45.3	32.1	30.1	31.0	28.0
2,000 - 2,999	19.4	29.3	20.2	20.4	23.9	22.1	19.9	21.1	21.8	22.6	16.5	20.2
3,000 - 3,999	19.8	18.0	13.6	20.6	17.5	16.9	16.6	22.2	16.2	21.6	16.3	18.9
4,000 - 4,999	14.6	8.8	14.9	12.0	15.0	11.2	15.2	3.4	13.2	13.9	19.7	14.3
5,000 - 5,999	8.2	4.9	7.5	6.0	2.4	5.7	7.1	5.1	10.2	6.1	8.7	7.5
6,000 - 9,999	10.4	5.4	5.5	5.9	1.9	6.6	6.9	1.0	5.3	4.4	6.4	8.2
10,000 and over	3.9	1.2	1.9	1.7	0.6	1.1	2.4	1.9	1.2	1.3	1.4	2.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1961												
under 1,999	23.1	35.5	34.4	33.8	34.3	38.5	28.5	32.2	34.3	29.9	32.2	27.4
2,000 - 2,999	18.2	24.1	17.9	19.5	23.0	20.0	19.1	18.2	16.4	19.5	16.5	18.8
3,000 - 3,999	17.9	16.4	15.9	18.2	24.2	18.0	17.4	21.4	20.4	19.7	17.6	18.0
4,000 - 4,999	15.2	10.7	14.0	12.3	9.5	9.4	15.0	13.7	11.2	15.5	17.0	14.5
5,000 - 5,999	8.1	5.1	7.6	6.7	5.4	6.9	9.0	7.9	7.1	6.9	8.4	7.8
6,000 - 9,999	12.9	6.5	8.7	7.2	2.9	5.5	8.3	4.3	8.6	6.3	6.8	10.1
10,000 and over	4.6	1.7	1.5	2.3	0.7	1.7	2.7	2.3	2.0	2.2	1.5	3.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962												
under 1,999	22.0	29.9	38.3	30.0	32.9	33.8	28.0	35.9	30.7	30.1	29.3	25.9
2,000 - 2,999	17.8	24.5	19.8	20.9	23.3	22.6	17.8	17.7	19.0	21.5	18.0	18.9
3,000 - 3,999	18.5	20.0	12.5	18.8	20.3	21.5	18.0	26.1	19.2	17.4	14.2	18.2
4,000 - 4,999	14.2	11.8	12.6	13.6	12.4	10.9	14.3	8.3	12.1	14.4	19.8	14.2
5,000 - 5,999	8.6	6.0	6.2	6.9	7.6	2.3	9.4	6.3	9.1	8.0	8.5	8.2
6,000 - 9,999	13.6	5.8	8.2	6.9	1.9	7.9	8.7	4.7	8.0	6.6	7.8	10.6
10,000 and over	5.3	2.0	2.4	2.9	1.6	1.0	3.8	1.0	1.9	2.0	2.4	4.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1963												
under 1,999	22.0	31.0	35.1	33.5	32.1	33.9	27.9	42.7	31.6	28.0	30.0	26.2
2,000 - 2,999	16.3	18.3	14.8	17.8	23.3	20.0	16.7	22.9	20.6	18.3	15.8	17.0
3,000 - 3,999	16.8	20.6	19.2	17.6	17.9	17.4	17.5	15.4	18.0	18.9	15.5	17.3
4,000 - 4,999	15.2	13.0	11.9	14.0	13.7	13.9	14.6	10.6	11.3	17.5	15.9	14.8
5,000 - 5,999	10.4	4.9	7.8	6.8	7.3	4.9	10.0	4.4	8.3	8.8	12.5	9.5
6,000 - 9,999	13.6	10.0	8.2	7.6	4.9	7.5	10.1	3.0	9.4	6.7	8.5	11.1
10,000 and over	5.7	2.2	3.0	2.7	0.8	2.4	3.2	1.0	0.8	1.8	1.8	4.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

INCOME DISTRIBUTION BY ECONOMIC REGIONS,
COUNTIES AND DISTRICTS, 1960-1963
(Per cent of total income recipients)

Income Class \$	NORTHEASTERN ONTARIO						Region
	A — Clay Belt			B — Nickel Range		C — Sault	
	Cochrane	Nipissing	Timiskaming	Manitoulin	Sudbury	Algoma	
1960							
under 1,999	26.7	31.5	26.3	42.6	21.8	22.7	24.9
2,000 - 2,999	15.7	20.6	18.9	19.1	13.4	12.7	15.2
3,000 - 3,999	23.5	17.2	24.9	20.9	12.1	13.3	16.5
4,000 - 4,999	15.9	13.9	15.0	10.7	23.0	16.2	17.9
5,000 - 5,999	8.9	7.7	7.6	6.1	17.1	15.3	12.9
6,000 - 9,999	7.9	7.3	6.0	0.0	11.1	17.7	11.0
10,000 and over	1.4	1.8	1.3	0.6	1.5	2.1	1.6
TOTAL	100.0	100.0	100.0	100.00	100.0	100.0	100.0
1961							
under 1,999	27.6	32.1	29.1	48.2	21.7	25.3	26.0
2,000 - 2,999	16.1	17.9	15.7	15.0	12.5	12.5	14.2
3,000 - 3,999	20.6	15.6	26.3	18.1	11.2	13.2	15.5
4,000 - 4,999	15.9	14.7	14.1	7.9	21.9	12.9	16.9
5,000 - 5,999	8.2	8.9	6.8	1.2	19.3	14.4	13.3
6,000 - 9,999	10.0	8.6	6.0	8.6	11.5	19.7	12.2
10,000 and over	1.6	2.2	2.0	1.0	1.9	2.0	1.9
TOTAL	100.0	100.0	100.0	100.00	100.0	100.0	100.0
1962							
under 1,999	26.3	29.2	30.4	45.9	21.9	22.3	24.9
2,000 - 2,999	15.4	17.0	16.5	17.1	13.2	12.6	14.3
3,000 - 3,999	17.3	17.7	23.0	21.3	13.3	12.9	15.6
4,000 - 4,999	16.8	15.0	15.3	7.3	18.8	14.0	16.3
5,000 - 5,999	11.1	8.8	6.3	5.1	18.0	14.1	13.3
6,000 - 9,999	11.2	9.8	7.0	2.6	12.8	21.9	13.6
10,000 and over	1.9	2.5	1.5	0.7	2.0	2.2	2.0
TOTAL	100.0	100.0	100.0	100.00	100.0	100.0	100.0
1963							
under 1,999	27.7	29.5	30.0	41.6	22.8	23.3	25.8
2,000 - 2,999	15.7	16.5	15.6	21.8	13.2	12.2	14.2
3,000 - 3,999	17.5	15.8	24.1	15.8	12.4	11.2	14.7
4,000 - 4,999	16.2	14.9	14.6	6.4	19.0	12.1	15.7
5,000 - 5,999	9.5	10.2	6.8	8.5	18.2	14.2	13.2
6,000 - 9,999	11.6	11.2	7.0	5.1	12.5	24.0	14.3
10,000 and over	1.8	1.9	1.9	0.8	1.9	3.0	2.1
TOTAL	100.0	100.0	100.0	100.00	100.0	100.0	100.0

INCOME DISTRIBUTION BY ECONOMIC REGIONS,
COUNTIES AND DISTRICTS, 1960-1963
(Per cent of total income recipients)

Income Class \$	LAKE ST. CLAIR				LAKE ERIE				
	A — Border		B — Lambton						Region
	Essex	Kent	Lambton	Region	Elgin	Middlesex	Norfolk	Oxford	
1960									
under 1,999	27.6	34.4	27.5	28.9	31.1	26.6	38.4	31.1	29.2
2,000 - 2,999	17.4	18.3	15.5	17.2	22.5	22.2	21.0	21.4	22.0
3,000 - 3,999	16.7	18.5	14.1	16.5	20.2	20.3	16.8	21.7	20.1
4,000 - 4,999	17.9	13.1	14.6	16.2	9.7	13.9	10.0	14.1	13.0
5,000 - 5,999	9.3	7.1	11.5	9.3	6.3	6.8	4.7	5.0	6.2
6,000 - 9,999	9.1	6.6	14.2	9.8	8.5	7.4	6.4	4.6	7.0
10,000 and over	2.0	2.0	2.6	2.1	1.7	2.8	2.7	2.1	2.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1961									
under 1,999	28.7	35.6	27.1	29.7	31.2	26.1	35.2	29.6	28.3
2,000 - 2,999	16.3	20.0	16.0	17.0	21.7	21.4	18.6	22.3	21.3
3,000 - 3,999	15.1	17.4	13.8	15.2	20.5	19.3	17.7	20.3	19.4
4,000 - 4,999	18.3	11.8	13.0	15.9	12.2	14.5	9.9	13.8	13.6
5,000 - 5,999	9.7	6.9	11.1	9.5	5.5	7.4	5.8	6.1	6.8
6,000 - 9,999	9.5	5.8	16.2	10.2	7.1	8.6	8.7	5.4	7.9
10,000 and over	2.4	2.5	2.8	2.5	1.8	2.7	4.1	2.5	2.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962									
under 1,999	27.8	30.2	24.7	27.6	30.3	24.7	36.1	30.6	27.5
2,000 - 2,999	15.2	19.3	16.6	16.3	21.4	19.5	19.3	18.1	19.6
3,000 - 3,999	14.7	17.5	13.2	14.9	21.1	18.1	18.3	19.6	18.8
4,000 - 4,999	17.7	14.7	14.1	16.3	11.1	15.3	11.6	16.3	14.5
5,000 - 5,999	10.5	8.3	10.7	10.1	6.8	9.1	5.9	7.2	8.2
6,000 - 9,999	11.2	7.3	17.7	11.9	7.8	10.2	6.6	6.1	8.8
10,000 and over	2.9	2.7	3.0	2.9	1.5	3.1	2.2	2.1	2.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1963									
under 1,999	26.5	30.3	25.2	27.0	28.8	25.3	34.3	30.3	27.5
2,000 - 2,999	15.4	18.3	16.8	16.3	20.7	19.2	19.8	19.0	19.5
3,000 - 3,999	12.8	16.7	13.9	13.8	19.6	17.7	14.5	19.6	18.0
4,000 - 4,999	14.6	12.2	12.1	13.6	12.5	14.9	13.7	15.1	14.5
5,000 - 5,999	13.4	10.0	9.9	11.9	6.8	9.3	5.9	7.2	8.2
6,000 - 9,999	14.3	9.8	18.3	14.3	9.0	10.5	8.5	6.5	9.4
10,000 and over	3.0	2.7	3.8	3.1	2.6	3.1	3.3	2.3	2.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

INCOME DISTRIBUTION BY ECONOMIC REGIONS,
COUNTIES AND DISTRICTS, 1960-1963
(Per cent of total income recipients)

Income Class \$	MID-WESTERN ONTARIO					LAKEHEAD-NORTHWESTERN ONTARIO			
	Huron	Perth	Waterloo	Wellington	Region	Kenora	Rainy River	Thunder Bay	Region
1960									
under 1,999	40.9	32.5	26.4	30.2	29.5	28.5	28.3	25.3	26.3
2,000 - 2,999	24.7	22.8	20.8	18.2	20.9	16.3	18.3	16.5	16.7
3,000 - 3,999	15.7	21.4	19.7	22.7	20.2	18.9	13.2	18.8	18.3
4,000 - 4,999	8.5	12.5	17.2	14.3	15.1	16.4	17.4	16.4	16.5
5,000 - 5,999	4.3	4.6	7.5	6.3	6.5	9.0	12.0	10.8	10.5
6,000 - 9,999	4.6	4.4	5.8	6.2	5.6	9.6	8.5	10.0	9.7
10,000 and over	1.3	1.8	2.6	2.1	2.2	1.3	2.3	2.2	2.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1961									
under 1,999	41.7	33.8	24.8	32.2	29.4	28.0	27.8	25.7	26.4
2,000 - 2,999	20.9	21.2	21.2	21.0	21.1	17.2	15.1	17.0	16.8
3,000 - 3,999	17.7	19.4	19.3	19.0	19.1	14.9	14.5	15.8	15.5
4,000 - 4,999	8.3	13.8	16.2	13.7	14.5	17.4	17.5	17.3	17.4
5,000 - 5,999	5.1	4.9	8.8	4.9	7.1	10.5	13.7	11.2	11.3
6,000 - 9,999	4.6	4.8	7.3	6.8	6.5	10.5	10.1	11.0	10.8
10,000 and over	1.7	2.1	2.4	2.4	2.3	1.5	1.3	2.0	1.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962									
under 1,999	38.2	31.1	23.6	28.6	27.2	29.1	30.4	24.4	26.0
2,000 - 2,999	21.6	21.6	19.5	18.2	19.7	16.3	13.3	15.2	15.2
3,000 - 3,999	18.0	19.1	19.3	21.2	19.5	15.6	13.8	18.2	17.2
4,000 - 4,999	10.3	13.4	16.4	15.5	15.2	15.7	17.5	17.4	17.1
5,000 - 5,999	5.3	6.6	10.2	6.9	8.5	9.9	9.8	10.3	10.1
6,000 - 9,999	4.6	6.2	8.3	7.3	7.5	11.7	12.9	12.6	12.5
10,000 and over	2.0	2.0	2.7	2.3	2.4	1.7	2.3	1.9	1.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1963									
under 1,999	36.5	31.0	23.3	27.8	26.6	27.0	28.6	25.0	25.7
2,000 - 2,999	22.0	20.7	19.2	19.8	19.8	15.4	14.0	16.9	16.3
3,000 - 3,999	19.2	19.4	18.2	17.7	18.4	14.7	15.9	15.0	15.0
4,000 - 4,999	9.9	13.4	15.8	16.2	15.0	17.3	14.5	16.5	16.5
5,000 - 5,999	5.6	6.8	10.6	8.2	9.0	13.1	12.0	11.6	12.0
6,000 - 9,999	4.8	6.0	10.0	7.9	8.5	11.0	12.0	13.0	12.5
10,000 and over	2.0	2.7	2.9	2.4	2.7	1.5	3.0	2.0	2.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

INCOME DISTRIBUTION BY ECONOMIC REGIONS,
COUNTIES AND DISTRICTS, 1960-1963
(Per cent of total income recipients)

Income Class \$	LAKE ONTARIO								Region
	Durham	Haliburton	Hastings	Lennox & Addington	Northumber-land	Peter-borough	Prince Edward	Victoria	
1960									
under 1,999	25.6	43.2	31.3	37.8	34.6	27.3	37.0	39.9	31.6
2,000 - 2,999	18.9	23.9	19.4	18.8	21.1	17.2	26.8	23.6	19.7
3,000 - 3,999	21.2	13.9	20.3	17.0	22.5	18.0	16.0	18.1	19.3
4,000 - 4,999	20.1	8.1	13.3	13.7	13.0	15.6	9.0	9.6	14.0
5,000 - 5,999	8.1	4.0	5.6	7.6	4.7	9.9	5.3	4.3	6.9
6,000 - 9,999	4.4	5.9	7.9	3.9	2.7	9.9	4.8	3.4	6.7
10,000 and over	1.7	1.0	2.2	1.2	1.4	2.1	1.1	1.1	1.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1961									
under 1,999	27.0	39.6	30.7	38.8	32.7	25.7	36.9	38.8	30.9
2,000 - 2,999	14.8	20.6	19.3	19.0	18.7	15.8	22.5	20.6	18.1
3,000 - 3,999	20.2	15.3	19.0	17.3	20.2	18.0	16.6	18.9	18.7
4,000 - 4,999	21.1	7.5	13.4	13.3	14.7	17.6	10.5	11.0	15.1
5,000 - 5,999	9.1	10.7	8.6	6.7	5.3	10.6	6.8	3.8	8.2
6,000 - 9,999	6.0	5.3	7.2	3.2	7.0	10.0	4.4	5.3	7.1
10,000 and over	1.8	1.0	1.8	1.7	1.4	2.3	2.3	1.6	1.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962									
under 1,999	26.1	35.0	28.5	32.2	31.0	25.0	35.6	31.5	28.7
2,000 - 2,999	14.0	25.9	20.2	17.0	18.6	16.5	20.8	18.4	18.2
3,000 - 3,999	17.2	15.7	19.2	17.8	24.0	15.6	16.4	23.8	18.7
4,000 - 4,999	16.1	9.4	13.4	15.6	11.6	14.4	11.2	12.2	13.5
5,000 - 5,999	15.1	4.6	8.3	8.9	6.9	11.6	6.8	6.4	9.4
6,000 - 9,999	9.6	8.3	8.1	7.2	6.2	14.3	6.5	5.6	9.3
10,000 and over	1.9	1.1	2.3	1.3	1.7	2.6	2.7	2.1	2.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1963									
under 1,999	24.1	36.8	31.6	35.3	26.8	23.5	36.8	34.7	28.9
2,000 - 2,999	15.4	19.6	17.8	17.6	18.1	15.4	20.2	19.5	17.2
3,000 - 3,999	15.2	20.9	17.8	18.7	23.6	15.3	17.7	16.1	17.5
4,000 - 4,999	14.7	11.4	12.7	13.3	14.2	14.8	12.0	15.8	13.9
5,000 - 5,999	15.4	3.1	8.4	8.8	9.0	12.9	5.8	7.1	10.1
6,000 - 9,999	13.4	6.1	9.4	4.6	6.6	15.1	5.5	5.7	10.2
10,000 and over	1.8	2.1	2.3	1.7	1.7	3.0	2.0	1.1	2.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

INCOME DISTRIBUTION BY ECONOMIC REGIONS,
COUNTIES AND DISTRICTS, 1960-1963
(Per cent of total income recipients)

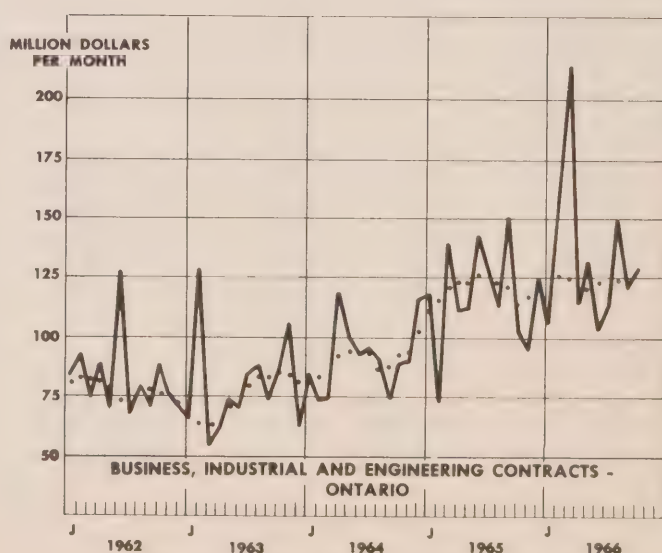
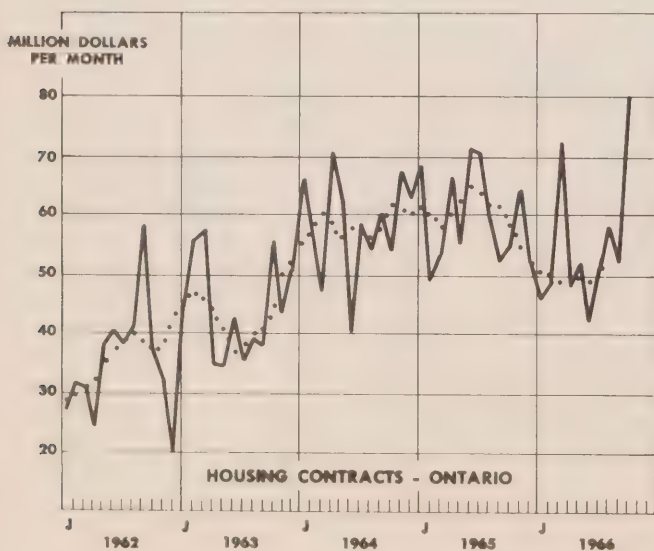
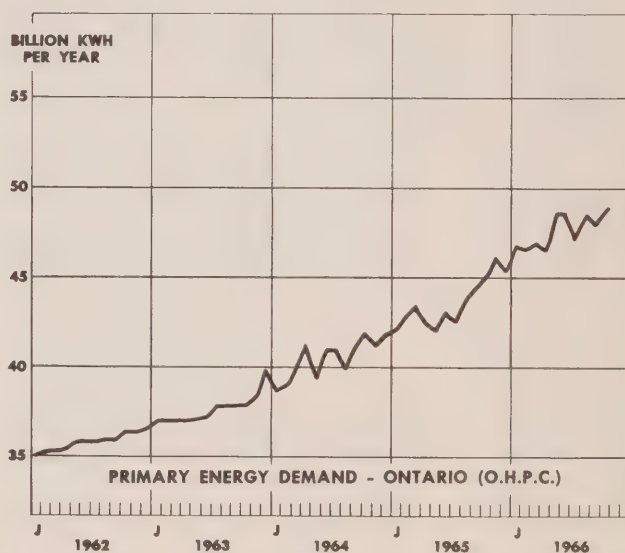
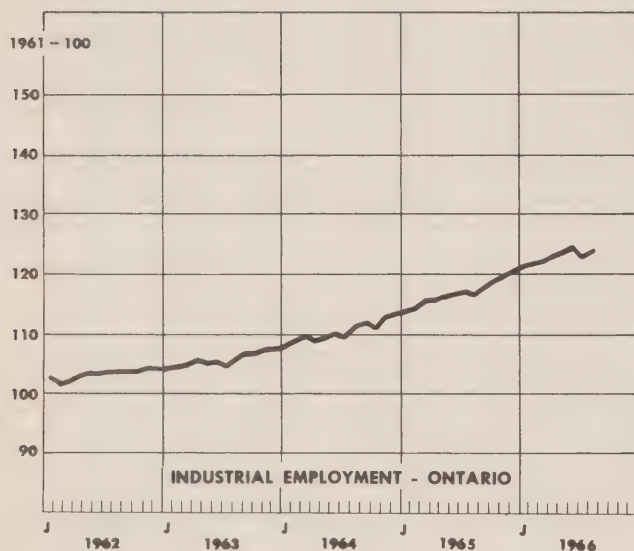
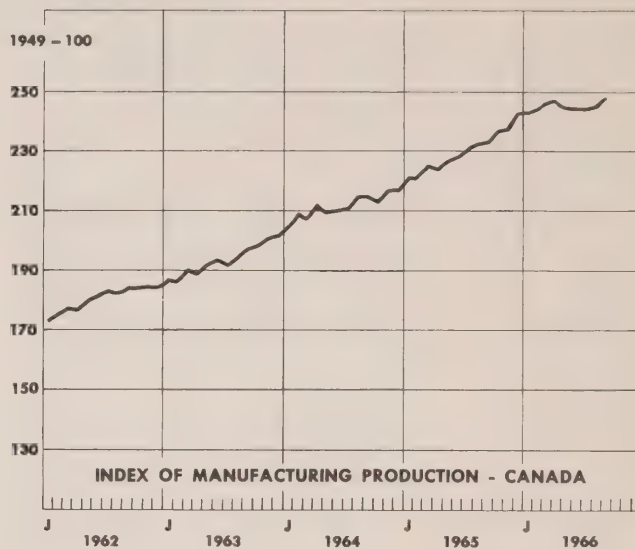
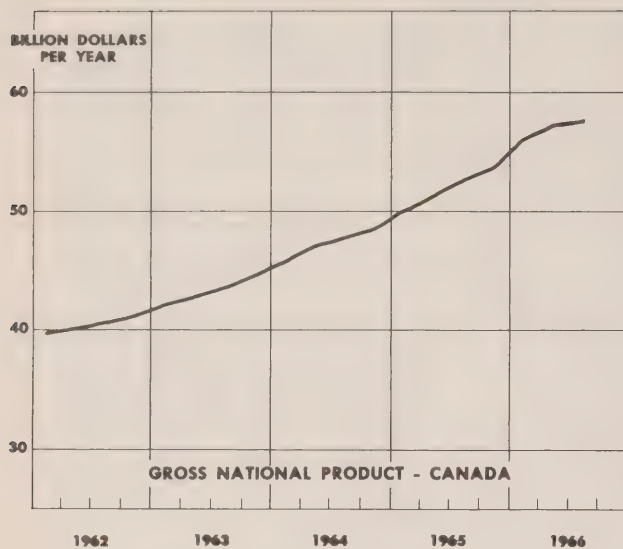
Income Class \$	GEORGIAN BAY						Region
	A — Blue Water				B — Highlands		
	Bruce	Dufferin	Grey	Simcoe	Muskoka	Parry Sound	
1960							
under 1,999	41.7	38.0	38.3	34.9	36.1	38.9	37.1
2,000 - 2,999	26.8	19.8	20.3	22.1	20.9	21.0	22.0
3,000 - 3,999	14.8	17.8	19.8	21.9	17.7	18.9	19.7
4,000 - 4,999	7.5	10.8	11.3	10.5	10.7	11.1	10.4
5,000 - 5,999	4.5	6.5	3.9	4.5	6.1	4.4	4.6
6,000 - 9,999	3.6	6.0	4.9	4.0	7.4	4.6	4.6
10,000 and over	1.1	1.1	1.5	2.1	1.1	1.1	1.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1961							
under 1,999	41.3	42.7	34.0	33.8	34.5	37.8	35.6
2,000 - 2,999	21.2	18.2	22.6	21.3	23.8	22.2	21.7
3,000 - 3,999	16.1	21.8	19.4	20.5	17.4	16.2	19.1
4,000 - 4,999	8.8	8.4	9.4	12.0	11.7	11.5	10.9
5,000 - 5,999	5.0	3.1	5.4	5.7	6.0	5.4	5.5
6,000 - 9,999	5.9	4.6	7.2	4.9	6.0	5.9	5.6
10,000 and over	1.7	1.2	2.0	1.8	0.6	1.0	1.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962							
under 1,999	40.2	35.6	33.8	32.3	35.9	37.9	34.6
2,000 - 2,999	22.0	17.6	22.2	19.3	19.1	19.9	20.2
3,000 - 3,999	18.3	15.4	19.7	19.7	20.2	18.2	19.2
4,000 - 4,999	8.1	11.1	11.1	12.7	10.5	12.2	11.5
5,000 - 5,999	4.3	8.5	5.2	7.0	5.5	5.0	6.0
6,000 - 9,999	5.7	9.9	6.2	7.2	6.2	5.6	6.7
10,000 and over	1.4	1.9	1.8	1.8	2.6	1.2	1.8
TOTAL	100.00	100.0	100.0	100.0	100.0	100.0	100.0
1963							
under 1,999	36.7	37.5	35.8	32.4	35.3	39.2	34.7
2,000 - 2,999	23.7	21.2	20.8	18.2	20.9	17.9	19.7
3,000 - 3,999	19.0	19.0	17.7	18.6	18.2	16.6	18.3
4,000 - 4,999	7.2	7.4	13.0	14.1	11.9	10.6	12.2
5,000 - 5,999	5.7	7.0	4.7	7.2	7.0	6.0	6.4
6,000 - 9,999	6.0	5.6	5.9	7.6	6.1	8.5	6.9
10,000 and over	1.7	2.3	2.1	1.9	0.6	1.2	1.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

APPENDIX B

AVERAGE ANNUAL INCOME BY REGIONS, COUNTIES AND DISTRICTS, 1960-1963

	1960	1961	1962	1963		1960	1961	1962	1963
	\$					\$			
<u>METROPOLITAN</u>					<u>LAKE ST. CLAIR (Cont'd)</u>				
Halton	4,266	4,276	4,509	4,676	B — Lambton				
Ontario	3,890	3,872	4,128	4,351	Lambton	3,901	3,951	4,057	4,176
Peel	4,286	4,517	4,707	4,684	Region	3,646	3,676	3,840	4,060
York	3,938	4,092	4,199	4,319	<u>LAKE ERIE</u>				
Region	3,961	4,106	4,229	4,352	Elgin	3,238	3,232	3,136	3,464
<u>NIAGARA</u>					Middlesex	3,552	3,626	3,776	3,848
A — Burlington					Norfolk	3,113	3,564	3,061	3,391
Brant	3,391	3,499	3,509	3,739	Oxford	3,226	3,362	3,334	3,407
Wentworth	3,932	4,004	4,223	4,332	Region	3,410	3,522	3,548	3,678
B — Niagara					<u>MID-WESTERN ONTARIO</u>				
Haldimand	3,090	3,295	3,312	3,241	Huron	2,726	2,733	2,924	3,054
Lincoln	3,700	3,807	3,999	4,172	Perth	3,094	3,156	3,239	3,343
Welland	3,628	3,758	3,847	3,902	Waterloo	3,532	3,610	3,701	3,850
Region	3,756	3,851	4,014	4,131	Wellington	3,325	3,254	3,390	3,522
<u>EASTERN ONTARIO</u>					Region	3,344	3,380	3,495	3,633
A — Ottawa Valley					<u>LAKE ONTARIO</u>				
Carleton	3,932	4,118	4,205	4,354	Durham	3,429	3,519	3,725	3,868
Lanark	2,946	3,068	3,128	3,465	Haliburton	2,676	2,910	3,045	3,110
Prescott	3,050	3,261	3,212	3,477	Hastings	3,362	3,368	3,414	3,480
Renfrew	3,175	3,258	3,372	3,364	Lennox and				
Russell	2,803	2,819	2,973	3,033	Addington	2,942	2,951	3,186	3,161
B — Upper St. Lawrence					Northumberland	2,919	3,195	3,197	3,435
Dundas	3,043	2,947	2,957	3,171	Peterborough	3,640	3,742	3,837	4,051
Frontenac	3,323	3,603	3,656	3,730	Prince Edward	2,927	3,015	3,151	3,173
Glengarry	2,401	3,211	3,052	2,724	Victoria	2,719	2,941	3,176	3,110
Grenville	3,192	3,325	3,320	3,261	Region	3,279	3,372	3,474	3,594
Leeds	3,177	3,369	3,298	3,489	<u>LAKEHEAD-NORTHWESTERN ONTARIO</u>				
Stormont	3,361	3,348	3,497	3,527	Kenora	3,465	3,539	3,539	3,684
Region	3,572	3,742	3,813	3,936	Rainy River	3,600	3,666	3,688	3,807
<u>NORTHEASTERN ONTARIO</u>					Thunder Bay	3,733	3,752	3,808	3,815
A — Clay Belt					Region	3,662	3,701	3,741	3,787
Cochrane	3,551	3,561	3,688	3,671	<u>GEORGIAN BAY</u>				
Nipissing	3,275	3,408	3,558	3,602	A — Blue Water				
Timiskaming	3,396	3,369	3,324	3,441	Bruce	2,576	2,860	2,845	2,972
B — Nickel Range					Dufferin	3,007	2,685	3,247	3,116
Manitoulin	2,558	2,710	2,437	2,759	Grey	2,903	3,119	3,161	3,092
Sudbury	3,999	4,061	4,046	4,056	Simcoe	3,000	3,102	3,234	3,315
C — Sault					B — Highlands				
Algoma	4,130	4,090	4,232	4,413	Muskoka	3,004	2,973	3,102	2,996
Region	3,777	3,809	3,868	3,928	Parry Sound	2,716	2,953	2,941	3,003
<u>LAKE ST. CLAIR</u>					Region	2,901	3,031	3,132	3,164
A — Border					ONTARIO	3,711	3,825	3,932	4,052
Essex	3,668	3,738	3,893	4,154					
Kent	3,285	3,191	3,448	3,668					

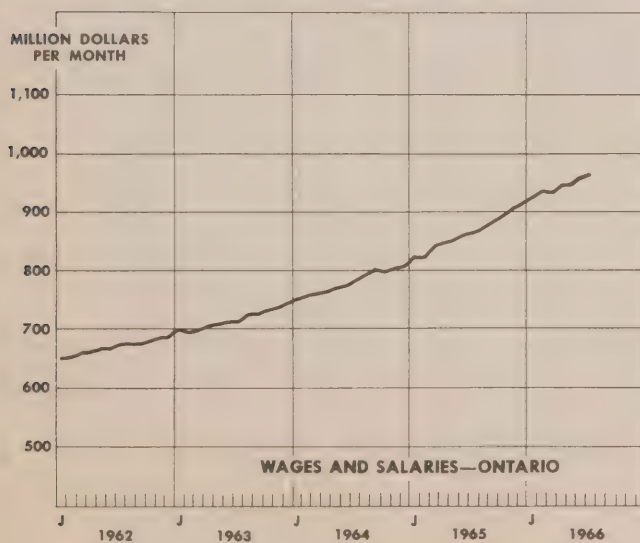
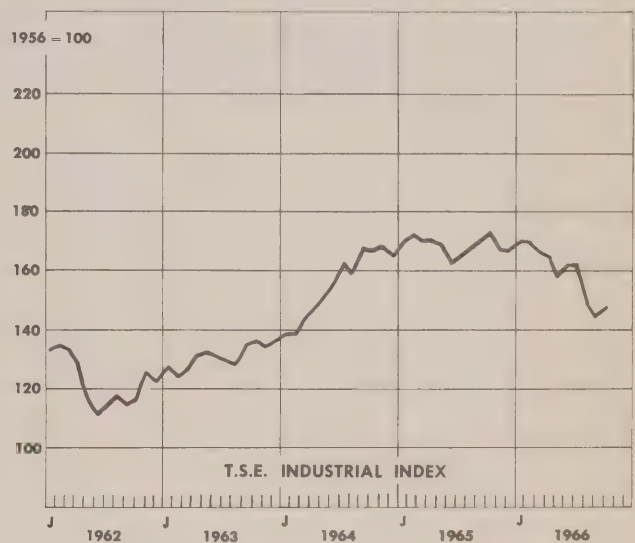
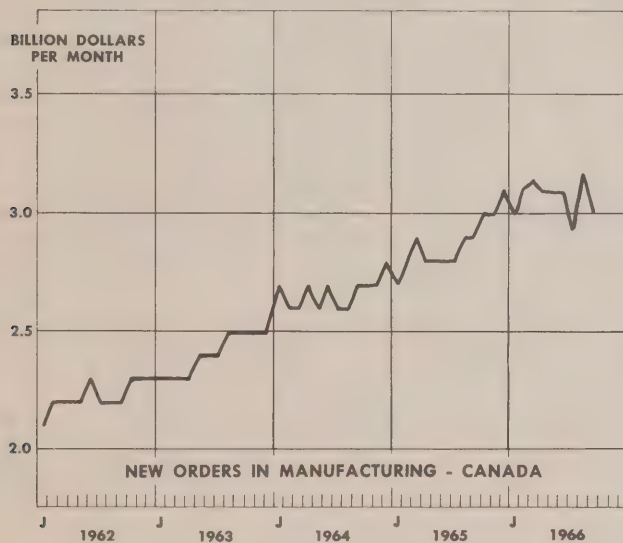
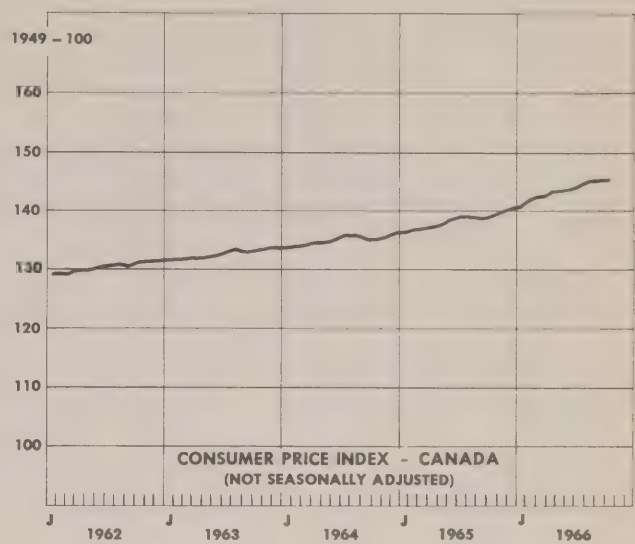
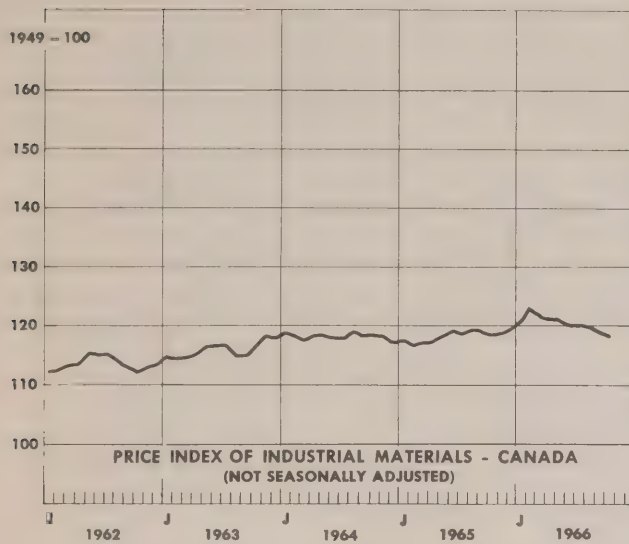
ECONOMIC INDICATORS—SEASONALLY ADJUSTED

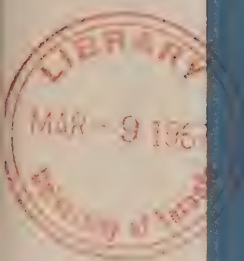


..... TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED





ONTARIO ECONOMIC REVIEW



DEPARTMENT OF ECONOMICS AND DEVELOPMENT

Hon. Stanley J. Randall, Minister

Stuart W. Clarkson, Deputy Minister

CEMBER 1966
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No. 12

OFFICE OF THE CHIEF ECONOMIST

H. Ian Macdonald, Chief Economist

CONTENTS

The Ontario Economy	1
Federal-Provincial Conference:	
A Brief Report	2
Canada and the U.S. Guidelines,	
<i>Henk M. Ploeger</i>	5
Indicators and Charts	13
Ontario Economic Review	
Index of Feature Articles	
1963-1966	16

THE ONTARIO ECONOMY

Toward the end of 1966 the economy showed signs of slack, with the seasonally adjusted Index of Industrial Production for November rising only 0.3 per cent from the preceding month. In November the Index was recorded at 279.1 (based on 1949 = 100). Most of the gain came from electric power and gas utilities which rose 2.5 per cent; manufacturing and mining rose only fractionally (0.1 per cent and 0.2 per cent respectively).

Both components of the utilities advanced, with electric power up more than two per cent, and gas up more than three per cent. In manufacturing the overall gain was due to increases in non-durables production, as durables declined fractionally. Eight out of 11 major groups in non-durables rose, ranging from marginal amounts to five per cent. Declines were recorded in the remaining leather products, foods and beverages, and products of petroleum and coal groups. In durables the gains in electrical apparatus and supplies (2.1 per cent), wood products (2.7 per cent) and transportation equipment (0.8 per cent) were offset by reductions in non-metallic mineral products (down 3.2 per cent), iron and steel products (down 1.7 per cent), and non-ferrous metal products (down 1.5 per cent). In mining the overall increase was due to a 3.7 per cent increase in fuel production that just more than offset declines in metal and non-metal production.

Based on a comparison of November figures for 1965 and 1966, there has been a 5.9 per cent increase in the overall Index of Industrial Production. Elec-

tric power and gas utilities have shown the greatest increase (9.9 per cent), followed by mining (6.7 per cent) and manufacturing (5.3 per cent). In the manufacturing index, non-durables at 5.5 per cent were slightly ahead of durables, which were up 5.1 per cent from the previous November.

In construction activity, November housing figures were not at all favourable — although this could in part be attributed to the termination of the Winter House-Building Incentive Program. Actual starts in Ontario centres of 5,000 population and over were down 24 per cent from the previous year. Starts for the first 11 months of 1966, at 42,305, were down 23 per cent. Seasonally-adjusted housing contract awards in November — one of the leading indicators of activity in the coming months — were down considerably from the previous month. Combined with the reduced numbers of units under construction (38,758 on November 30, 1966 as opposed to 54,158 one year earlier), this would indicate that availability of housing will not show much improvement in the immediate future.

In other areas of construction activity, institutional and industrial contract awards in November were up 118 per cent and 27 per cent respectively from one year earlier; however this was countered by 52 per cent and 27 per cent declines in engineering and business contract awards. As a result total awards — including housing — were down 6.1 per cent from November, 1965.

LABOUR MOBILITY An Annotated Bibliography

The Economic Analysis Branch of the Office of the Chief Economist has produced a 31-page annotated bibliography of books and articles relating to labour mobility. Copies may be obtained free of charge by writing to:

Labour Mobility Bibliography
Editor, Ontario Economic Review
Office of the Chief Economist
Parliament Buildings
Toronto 5, Ontario

FEDERAL-PROVINCIAL CONFERENCE

A BRIEF REPORT

During the last full week of October, 1966, provincial and federal representatives met in Ottawa to discuss federal-provincial arrangements for the period beginning April 1, 1967. For two days the Tax Structure Committee discussed a new equalization formula and federal-provincial tax- and cost-sharing arrangements. During most of the remaining time Prime Minister Pearson, the Ministers of Finance and Manpower and Immigration and the Secretary of State met with provincial premiers, prime ministers and education ministers to consider financial assistance to technical and vocational training and post-secondary educational institutions. On the last day the conference concluded with a plenary session of premiers and prime ministers.

Equalization Formula

The objective of equalization is to allow the governments of poorer provinces to provide some minimum level of services to their residents. Minimum has been defined by the federal government as being equal to the national average.

There are two broad reasons why a provincial government has a relatively low level of revenue and hence why the residents of that province may not receive this minimum level of services. First, the province may have relatively large numbers of residents in lower income brackets. Secondly, it may be unwilling to tax its residents to the same degree as other provincial governments tax their residents; that is, it may not make an adequate tax effort. In Canada today the former reason is more relevant. Ideally, equalization payments compensate provinces because they have unfavourable income distributions and not because they have poor tax efforts.

At the meeting of the Tax Structure Committee, the following equalization formula was adopted:

$$G_i = P_i \left[\frac{R_c}{P_c} - \frac{\left(\frac{R_c}{B_c} \right) B_i}{P_i} \right]$$

where

G is the amount of the equalization payment

P is population

R is actual tax revenues (from one or more sources)

B is the common agreed-upon tax base (for one or more sources)

subscript i refers to province i

subscript c refers to all provinces combined.

Quite clearly the equalization payment G_i depends upon the population of the province times the disparity between per capita tax revenue for all provinces combined $\left(\frac{R_c}{P_c} \right)$ and the per capita hypothetical

cal tax yield in the province $\left[\frac{\left(\frac{R_c}{B_c} \right) \cdot B_i}{P_i} \right]$.

Note that the hypothetical tax yield in the province is calculated by multiplying the tax base in the province, B_i , by a national average tax rate $\left(\frac{R_c}{B_c} \right)$

rather than by the province's own tax rate. Thus the tax yield to the province is not its actual yield but a hypothetical tax yield. *When the per capita yield from a given tax for all provinces combined exceeds the hypothetical per capita yield from that tax to the province, the province receives an equalization payment.*

A simple example illustrates the calculation of equalization payments. It is estimated that in fiscal 1966-67 the population of Nova Scotia will be 778,000. It is also estimated that in 1966-67 total retail sales tax revenue in the 10 provinces will reach \$689 million and Canada's population will be 20 million; therefore per capita retail sales tax revenue in all provinces combined will reach \$34.45. In 1964 total retail sales in the 10 provinces amounted to \$16,500 million; this figure is divided into total retail sales tax revenue in 1966-67 (\$689 million) to get a national average tax rate $\left(\frac{R_c}{B_c} \right)$ of .0418 or 4.18 per cent.¹

¹Note that the figures for tax base lag more than two years behind the figures for retail sales tax revenue. Retail sales figures are adjusted to take into account recent changes in the DBS concept of retail sales. This involves a reduction of \$350 per capita from total retail sales (to take into account the fact that food is not subject to retail sales taxes) as well as a further reduction of construction material sales.

Finally, total retail sales in Nova Scotia in 1964 were \$507 million. Thus the equalization payment to Nova Scotia is

$$\begin{aligned} G_1 &= 778,000 \times \left[\$34.45 - \frac{0.0418 \times \$507,000,000}{778,000} \right] \\ &= 778,000 \times (\$34.45 - \$27.24) \\ &= (778,000 \times \$7.21) \\ &= \$5.6 \text{ million} \end{aligned}$$

This exercise is carried out for *all* provincial revenues and the calculated equalization payments are added (regardless of whether they are positive or negative) to arrive at the total equalization payment to the province for the year.

The presence of hypothetical tax yield calculated from *national average tax rates* marks the only distinctive feature of the new formula itself. The old formula was the same except that *actual* tax yield R_1 was used instead of the *hypothetical* tax yield

$$\left[\left(\frac{R_c}{B_c} \right) \cdot B_1 \right] \cdot A$$

A consequence of using the latter rather than the former is that the amount of equalization going to provinces with relatively low tax efforts is reduced. For example, under the new formula a province which unilaterally lowers its retail sales tax rate below the national average does not lower its hypothetical retail sales tax yield. Hence it does not receive any additional equalization as a result of its move.² Under the old formula it can be demonstrated that it would receive some compensation for lowering its retail sales tax rate. Thus the new formula is an improvement in that equalization payments do not accrue to a province because it has a low tax effort.

The most important change in the new equalization proposal is its greater comprehensiveness. Under the old agreement, only the yields to provincial governments from the personal and corporate income tax, the estates tax and adjusted natural resource revenues were equalized. The new proposal equalizes the yields to provincial governments from *all* tax and other revenues. Thus the new proposal

takes into account a poor province's *total* financial capacity and makes it possible for it to provide a level of services closer to the national average level.

Another significant change in the new formula is that the standard tax yields (i.e., the yields from personal income tax, corporate income tax and estates taxes) are equalized up to the national average rather than up to the average of the two provinces having the highest tax yields.

There are two exceptions to the use of this formula. In the transition from the old formula to the new one, equalization payments to Saskatchewan declined from \$33 million to zero; consequently it was decided that they should be gradually phased out over the period 1967-1972. Saskatchewan will therefore receive \$27 million during the fiscal year 1967-68. Secondly, with the implementation of the new formula, the Atlantic Adjustment Grants were discontinued. Consequently, the federal government guaranteed not to allow the total equalization payment to any Atlantic province to fall below an amount equal to its Atlantic Adjustment Grant plus the equalization payment determined by the old formula. This guarantee is relevant only to Prince Edward Island since the increases in the equalization payments to other Atlantic provinces are relatively large.

Higher Education and Technical and Vocational Training Agreements Arising From The Conference

On March 31, 1967 federal grants to the universities of \$5.00 per capita (made through the Canadian Association of Universities and Colleges) will expire. Under this program grants to Ontario universities for the fiscal year 1966-67 will reach an estimated \$33.4 million.

The Technical and Vocational Training Agreement also expires March 31, 1967. This agreement comprises 10 programs under which provincial governments receive federal assistance varying from 50 to 100 per cent of the costs of individual programs. It is the intention of the federal government to allow these 10 programs to lapse.

However, the federal government does intend to assume full responsibility for employment-orientated adult retraining. Consequently it will in effect finance some areas previously covered by these 10 programs. Just what parts will be financed depends on the definition of adult and on what will be regarded as retraining. Many of the details of this proposal have yet to be worked out by the federal and provincial representatives.

²To some extent a province may affect the national average tax rate by lowering its own rate. The decline in the national average tax rate will lower the provinces' hypothetical per capita yield and consequently increase its equalization payment. However, the unilateral reduction of its retail sales tax also reduces to some extent the per capita retail sales tax revenues for all provinces combined. If the per capita retail sales tax revenue for all provinces combined declines by the same amount as the per capita hypothetical yield to the province then there is no change in the disparity between the two and therefore no change in equalization payments.

In addition to providing financial assistance for operating costs, the federal government now provides financial assistance to provincial governments based on the capital costs of their technical and vocational schools. Under this capital expenditure program, a provincial government receives 75 per cent of capital costs up to the point where its total federal assistance amounts to \$480 times the province's population between the ages of 15 and 19 in the census year 1961. Thereafter the province receives additional assistance equal to 50 per cent of capital costs. In 1965 the expiry date of this capital assistance agreement was extended from March 31, 1967 to March 31, 1970.

At the October conference a number of provincial representatives expressed dissatisfaction with the 1970 expiry date; consequently the federal government proposed to extend it indefinitely. However, it also proposed to limit the total amount of federal financial assistance to \$800 times the 1961 provincial population between the ages of 15 and 19. Under this proposal Ontario would be entitled to approximately \$48 million in grants after March 31, 1967.

Beginning on April 1, 1967 the federal government will provide the provinces with either 50 per cent of operating costs of post-secondary institutions or \$15 per capita — whichever is to a province's advantage. It has been estimated that Ontario will receive \$106 million during the fiscal year 1967-68 if it chooses the \$15 per capita option. While federal and provincial representatives are still putting the finishing touches on the definitions of the terms post-secondary and operating costs, it does seem likely that a post-secondary educational institution will be defined as one which requires for admission the successful attainment of the academic level of junior matriculation. If this definition is used, all those institutions designated by provinces admitting students who have completed grade 12 will be included,³ and the 50-per-cent option will likely prove to be the more generous one from Ontario's point of view.

The method by which transfers are made from the federal treasury to provincial governments involves a unique combination of federal tax abatements, equalization payments and unconditional grants. Each province is to receive the following:

- (a) An additional four per cent of total personal income tax revenue and one additional percentage point of taxable corporate income. Since the federal government will simultaneously lower its personal income tax by four per cent and corporation income tax by one percentage point, the increased provincial government taxes will

not affect total tax payable by persons and corporations. Ontario residents will now pay 28 rather than 24 per cent of their personal income tax to the Ontario government. And the Ontario government will likely receive 13 rather than 12 percentage points of taxable corporate income.

- (b) An accompanying equalization payment (for provinces receiving equalization) which will be determined by the equalization formula described earlier. This has been labelled by the federal representatives as a "revenue equalization" payment.
- (c) An adjustment necessary to bring the above equalized tax abatement going to the provincial government up to 50 per cent of operating costs of post-secondary institutions or \$15 per capita — whichever option the province in question has chosen. Federal representatives have labelled this adjustment "program equalization," but it is in effect an unconditional grant since the provincial governments have no legal responsibility to spend it on post-secondary education.⁴

Tax-Sharing and Cost-Sharing Negotiations

Despite the Tax Structure Committee's projections of much larger deficits in the provincial-municipal sector of government relative to the federal government, the latter is providing no additional abatements of the personal and corporate income taxes to the provinces over and above those in the post-secondary education agreements.

At the conference, the federal government proposed to opt out of three major shared-cost programs — hospital insurance, the Canada assistance program and the health grants. As compensation for opting out, it offered to give the provinces an additional abatement of 17 percentage points of the personal income tax plus an equalization payment (in the case of provinces which received equalization) determined by the equalization formula described earlier.⁵ In addition, the federal government offered to provide an adjustment to bring total compensation up to an amount equal to the federal government

³The definition includes all those who have successfully completed grade 12 in Ontario, British Columbia and New Brunswick; and all those who have successfully completed grade 11 in the remaining provinces.

⁴There is indeed no legal responsibility for a province to spend any of the revenue transferred to it on post-secondary education.

⁵This equalization payment is determined by substituting the provincial and national yields for 17 percentage points of the personal income tax into the new equalization formula.

share of the total costs of the three programs in the forthcoming five-year period. This form of compensation is the same type as that described earlier in connection with the post-secondary education agreement.

Representatives of the provinces (except Quebec which has already opted out of the three programs in question) unanimously rejected this proposal. However Prime Minister Robarts stated that "... starting in 1969, we would be willing to consider

taking over the three major shared-cost programs in exchange for 17 points of the personal income tax."

One of the final concrete results of the conference was an agreement to reconsider these federal-provincial financial arrangements in two years time. This was done in order to allow all governments to absorb the recommendations of the Carter Commission and the (Ontario) Smith Committee in the interim before deciding on longer-term and more binding federal-provincial agreements.

CANADA AND THE U.S. GUIDELINES

HENK M. PLOEGER

Chief, Fiscal and Financial Analysis Section

Economic Analysis Branch

ONTARIO DEPARTMENT OF ECONOMICS AND DEVELOPMENT

For a considerable time, the United States has had large deficits in its balance of international payments. To meet these deficits, it has been forced to reduce its holdings of gold in its reserve fund. This has tended to bolster the reserve funds of other countries, mostly in the Western World, at the same time weakening the backing of the U.S. dollar. This development could not be allowed to continue and the United States moved to protect its currency as the major world trading currency by introducing various measures and guidelines over the past few years.

The United States has every right to correct its balance of payments. Canada did so in 1948 and again in 1962; and while our problems were more acute, in both instances we took more drastic action than the United States. In 1948 Canada imposed foreign exchange as well as import controls; in 1962 it introduced a 15 per cent surcharge on imports, and ultimately devalued and fixed the value of the Canadian dollar. While the latter measures did affect imports from other countries, none of Canada's major trading partners experienced any serious dislocations. Furthermore, it was in the interest of the world trading community that Canada's dollar was shored up and regained respectability.

The problem is, of course, that when a country as large and economically powerful as the United States prescribes corrective remedies, these are bound to have an impact on the economies of the countries

with whom it does business. This impact will be somewhat proportional to the type and degree of interdependence between the United States and its particular trading partner. On this account, Canada is in a unique position.

UNITED STATES CORRECTIVE MEASURES

The Interest Equalization Tax

The Interest Equalization Tax became effective in September, 1963. This tax, based on the value of the security acquired, is imposed at the rate of 15 per cent in the case of common stocks. In the case of debt securities, the rate of tax is geared to the remaining period to maturity, ranging from 2.75 per cent for maturities between 2¾ and 3½ years to 15 per cent for maturities in excess of 28½ years.¹ The application of this tax means that an issue floated in New York could, for the long-term maturities, have an effective yield of about one per cent less than normally. This in effect forces the borrower into proportionately higher interest costs.

In recognition of Canada's special position and vulnerability, Canada was given an exemption from

¹*Editor's note:* In January, 1967 this tax was doubled, raising the rate in the case of common stock, and doubling the rates on the sliding scale in the case of debt securities.

this tax provided its reserves of gold and foreign exchange remain below US \$2.6 billion, a healthy level of reserves by any historical standard.

U.S. Guideline Policies — Financial Institutions

In the spring of 1965, the United States issued guidelines for the investment policies of the banking system and the non-bank financial institutions. These initial guidelines did not apply to Canada either, but in December, 1965 they were extended to include Canada, except in the second instance indicated below.

The following U.S. guidelines have been of importance to Canada:

- (1) Non-bank financial institutions such as insurance companies and pension funds were not to lend, for *short-term* maturities of 10 years or less, more than 109 per cent of such loans outstanding at the end of 1964. That is, if such a financial institution had one million dollars in foreign loans outstanding at the end of 1964, such outstanding loans were not to exceed \$1,090,000 at any time in 1966.
- (2) *Long-term* (over 10 years) foreign investments by *non-bank financial institutions* in 1966 were not to exceed 105 per cent of the amount of such loans outstanding at September 30, 1965. These financial institutions, which include insurance and trust companies, have been a major source for Canadian borrowing in the United States. Canada, however, was exempted from this provision provided foreign exchange reserves did not exceed US \$2.6 billion.
- (3) *On banking investments*, foreign loans were not to exceed 109 per cent of the level outstanding at December 31, 1964. Again in simple terms, if a million dollars were borrowed by Canadian residents prior to this date, total loans outstanding could rise to \$1,090,000 by the end of 1966.

U.S. Guideline Policies — Private Business Concerns

Since the spring of 1965, private business has been on a voluntary restraint program, designed to maximize its contribution to the balance of payments. This voluntary program involved the following steps:

- (1) Export expansion.
- (2) Repatriation of income from abroad.
- (3) Repatriation of short-term financial assets.
- (4) Maximum use of funds obtained abroad for investment purposes.

In December, 1965, more specific guidelines were issued with the formulation of separate targets for direct investment abroad.

Under the new guidelines to business concerns, the U.S. government directed that during the 1965-1966 period "direct investment" by American industry in foreign countries should not exceed 90 per cent of that made between 1962 and 1964. If, for example, the total of undistributed profits of the foreign subsidiaries of a U.S. company plus the net funds which they received from the United States during the years 1962 to 1964 equalled one million dollars, then undistributed profits plus net funds received from the United States for the two years 1965-1966 could be as high as 90 per cent of this figure, or \$900,000. In other words, the annual average in 1965 and 1966 could be \$450,000, compared with an annual average of \$333,333 during the 1962-1964 period.

The U.S. companies were to maintain these goals in their overall position vis-a-vis their subsidiaries in the rest of the world. As a result, Canadian subsidiaries could receive more or less than is indicated by the percentage limitation of the guidelines. If a U.S. company felt that economic conditions warranted this, it could emphasize its investments in Canada at the expense of potential investments in Europe, or vice versa.

New Regulations Regarding Tourist Imports

On June 30, 1965, the President of the United States requested a reduction in the tourist exemption from \$100 to \$50 per person per year. However Congress refused to accept this change. Instead the following concessions were made:

- (1) The basis for valuation of tourist purchases was changed from wholesale to retail.
- (2) Duty-free liquor allowance was reduced from one gallon to one quart.
- (3) Goods in excess of \$10 (retail) were no longer to be mailed to the United States, but had to accompany the tourist.

A BRIEF COMPARISON BETWEEN THE UNITED STATES AND CANADIAN BALANCES OF PAYMENTS

The United States has run a chronic deficit in its international accounts since 1950. From that year to the end of 1965 the cumulative deficit reached almost \$33 billion, resulting in heavy losses of gold and greatly increased foreign holdings of liquid dollar assets. Consequently official holdings of the U.S. gold stock have fallen from about \$23 billion in

1950 to only \$13.3 billion in 1966 — \$1.3 billion over the \$12 billion earmarked to back the U.S. dollar. The United States, therefore, finds itself in a relatively precarious position: most of its total gold stock is earmarked, yet foreigners hold over \$23 billion of dollar claims potentially payable in gold on demand.

Deficits in the U.S. balance of payments are of a completely different nature from those in Canada. In the United States, basic commercial and service transactions produce healthy surpluses. The surplus on merchandise trade alone in recent years has generally been in excess of \$5 billion. An additional surplus has been recorded in service transactions, with large investment income surpluses more than offsetting deficits in shipping and foreign travel. The resulting balance on goods and services — Canada's current account balance — has consistently shown a great deal of strength (in 1964 and 1965 surpluses of \$8.5 billion and \$7.0 billion respectively were recorded). In contrast, Canada has suffered consistent deficits on current account ranging from \$1.0 billion to \$1.5 billion since the mid-fifties, with the exception of 1963 and 1964 when the deficits were more moderate.

The so-called current account surpluses of the United States have been more than offset by governmental military commitments abroad, grants in aid to developing countries, a large volume of private direct investment abroad, and private short-term capital outflows. As a consequence, the United States has had to balance its international accounts by a loss of gold and large increases in foreign holdings of liquid U.S. dollar assets.

During the past 15 years, Canada had its only surplus on current account in 1952. While the merchandise trade balances were favourable in seven of these 15 years (mostly in recent years), it has been the current non-merchandise transactions which have been consistently in the red. These deficits have grown from \$370 million in 1951 to over \$1,200 million today.

These continuing current account deficits have usually been the focus of attention in discussions of Canada's balance of payments. However, in looking at the problem of losses of gold and foreign exchange, all too often it has not been realized that there is no necessary connection between the two.

Canada has been acquiring a continuing flow of long-term capital from abroad in the form of foreign direct investment and Canadian long-term borrowing abroad. In most years, this inflow has been

more than adequate to keep the Canadian balance of payments in a sound position. These relatively autonomous capital flows are the really important considerations in an evaluation of the state of the balance of payments. When allowance is made for these long-term capital flows the imbalance in the Canadian balance of payments becomes relatively small. It is only when short-term, highly liquid capital flows become an important balancing factor that Canada's international accounts become a source of concern. Such liquid capital flows are highly volatile and can easily reverse themselves into an outward flow, leading to undesirable strains on our official reserves and the Canadian dollar.

SOME FACTS AND FIGURES

The Canadian Current Account

U.S. guidelines produced no visible effects on merchandise trade between Canada and the United States. In 1965 both imports and exports were more than 13 per cent higher than in 1964. In fact, imports rose by almost 16 per cent — a jump which would be considered sizable were the Canadian economy not in full gear. (In 1964 imports from the United States jumped by 17 per cent.) In 1966, exports to the United States in rising some 24 per cent significantly outpaced imports from that country, resulting in an actual decline in the trade deficit.

No unusual developments appear to have taken place in non-merchandise transactions with the United States in 1965. Interest and dividend payments, the obvious item to study, were moderately higher than the year before, but hardly enough to suggest a direct connection with the U.S. guidelines. Many U.S. companies may well have moderated their remittance of dividends because of substantial investment plans in Canada for 1966. During 1966, dividend payments abroad did not increase as might have been expected, but interest payments rose substantially as a result of the heavy volume of non-equity borrowing in the preceding year. The travel account with the U.S. deteriorated by some \$30 million in the first three quarters of 1966.

Long-term Capital Flows

As usual, Canada was a major recipient of foreign long-term capital in both 1964 and 1965, with more or less the same net inflow in both years. Foreign direct investment in Canada in 1965 was substantially larger than in the previous year, but this was more than offset by net sales to Canadians of outstanding Canadian stocks held by non-residents, a development clearly associated with the U.S. balance

of payments measures (15 per cent tax on common stock). In spite of the guidelines, direct U.S. investment was substantially higher again the following year, though partly offset by U.S. residents disposing of outstanding Canadian bonds and common stocks.²

Canada's exemption from the Interest Equalization Tax was most telling in the record volume of new issues of Canadian securities in the U.S. capital market. New issues of Canadian bonds amounted to about \$1.1 billion in 1964 and \$1.2 billion in 1965. Such new issues were especially heavy towards the end of the year, until they were officially deferred in mid-November to 1966 delivery dates. As a result, 1966 opened with an exceptional volume of such new issues and continued at a very high level, amounting to \$1,229 million during the first three quarters. On the whole, corporation bonds and debentures were an important part of this total, reflecting the very high level of business investment activity. In each quarter of 1966, the Government of Canada repurchased substantial amounts of its outstanding bonds in order to bring Canada's exchange reserve position below the maximum level agreed upon in acquiring an exemption from the Interest Equalization Tax. These government efforts were conspicuously assisted by an unusually heavy net outflow of capital for the acquisition of United States corporate stocks. During the first three quarters of 1966 this outflow was no less than \$236 million. Obviously, the New York Stock Exchange had become more interesting relative to Toronto when American participation in the Toronto Stock Exchange declined.

Short-term Capital Flows

The U.S. guidelines were responsible for significant developments in the flow of short-term capital assets. In 1964, there was an inflow of \$196 million for the acquisition of Canadian finance company paper. But following this, the U.S. guidelines and the finance company default in June of 1965 reduced foreign investors' interest and reversed this flow into an outflow of \$162 million.

The most dramatic reversal in flows occurred in the foreign currency business of Canadian banks. During 1964, Canadians had built up their swapped deposits³ and other foreign currency bank balances with Canadian banks, and these funds, together with increased balances deposited by U.S. residents, were channelled into investments in Britain⁴ and Continental Europe.

Following the introduction of the U.S. guideline program in February, 1965, the Minister of Finance requested that the chartered banks maintain their net asset position vis-a-vis U.S. residents at or above the level of this position at the end of 1964. As U.S. residents withdrew U.S. dollar deposits from Canadian banks in response to the guidelines, the banks met only part of this drain by liquidating investment in the United States. The remainder was met by drawing a phenomenal \$955 million during 1965 from other countries by liquidating assets and increasing liabilities.

The result of these moves was that, in spite of a \$529 million outflow to the United States, they registered a net inflow into Canada of \$426 million. These drastic flows were an important factor in financing the current account deficit during the first half of 1965. (During the second half, proceeds of new Canadian bond issues in the United States were the most important source for such financing.)

In 1966, swapped deposits loomed large again in the substantial net outflow of short-term capital; the largest volume by far left the country during the third quarter.

Canada's "Contribution" to the U.S. Balance of Payments

There is no agreement on a satisfactory way to measure Canada's contribution to the U.S. balance of payments. Canada's current account deficit with the U.S. in 1965 is estimated to have jumped to \$1.9 billion. This is an exceptionally large deficit, which compares with only \$1.1 billion in 1962. The current account balance is, of course, not a final measure of Canada's contribution.

²In the third quarter of 1966 a highly unusual development took place when a net inflow of \$90 million was recorded in Canadian direct investment abroad (normally an outflow of capital) in connection with the sale by B.A. Oil (Canada) of its U.S. subsidiary (B.A. Oil Products Co.) to Gulf Oil Co. in the United States for \$182.5 million. Gulf Oil owns 64.8 per cent of B.A. Oil. While the reason for this transaction remains uncertain at the present time it was undoubtedly against the spirit of the U.S. guideline policies. In a somewhat circumspect way it made available to B.A. Oil (Canada) a vast amount of capital, which would have been difficult to acquire any other way.

³Term deposits converted into foreign currency, usually U.S. dollars, which the bank has undertaken through a forward contract to convert back into Canadian dollars at maturity. The return to the depositor is determined by the yield on his foreign currency deposit and the profit or loss on the exchange swap.

⁴Great Britain was going through one of its exchange and balance of payments crises.

**CANADA'S "CONTRIBUTION" TO THE
U.S. BALANCE OF PAYMENTS
(Millions of Dollars)**

	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Merchandise exports	3,760	3,970	4,396	4,993
Merchandise imports	4,205	4,458	5,204	6,034
Trade Balance	— 445	— 488	— 808	—1,041
Non-Merchandise Balance	— 667	— 674	— 827	— 871
Current Account Balance	—1,122	—1,162	—1,635	—1,912
Long-term Capital	+ 668	+ 843	+1,013	+ 964
BALANCE I	— 454	— 319	— 622	— 948
Short-term Capital	+ 423	+ 7	+ 626	— 508
BALANCE II	— 31	— 312	+ 4	—1,456

Canada has been a traditional recipient of a vast inflow of U.S. capital. In recent years long-term capital inflows from the United States have run at about one billion dollars annually. When allowance is made for such long-term capital flows, one arrives at *Balance I* in the accompanying table, showing a Canadian contribution to the U.S. balance of payments with a range from over \$300 million in 1963 to over \$900 million in 1965. This *Balance I* is the most satisfactory measure of Canada's contribution, as it is the most stable measure over any period of time.

Admittedly, there is a fairly important flow of short-term capital between the two countries, but the very nature of these flows make them an unreliable and very volatile factor in the overall yardstick of Canada's role in the U.S. balance of payments. For the sake of comparison, short-term flows are also shown in the table, producing *Balance II*. This ranges from a U.S. contribution of four million dollars to Canada's balance of payments in 1964 to an exceptional Canadian contribution of over \$1.4 billion to the U.S. balance of payments in 1965.

At this point, it appears that Canada's contribution in 1966 has been substantially smaller than in 1965, a reflection of the limited impact of the U.S. guidelines on the Canadian balance of payments.

U.S. Corporate Borrowing in Europe

The U.S. guidelines are having their greatest impact on U.S. business investment in Europe. Large-scale U.S. private investment in Europe is of relatively recent origin. Consequently, the need for

fresh capital flows from the U.S. was quite large (in the absence of a substantial volume of retained earnings relative to expansion plans) when the guidelines were introduced to minimize this outflow.

The result of this was that U.S. companies turned to the European capital market on a large scale. *The Economist* of January 22, 1966 said:

"The new and significant element here is the influx of American subsidiaries, which were forced on to the European capital market by last year's curbs on American bank lending abroad and, more importantly, by the "voluntary" restraints on loans from American parent companies to overseas affiliates. These American subsidiaries began borrowing in Europe's capital markets only late last year, but once they came it was with a rush: in the fourth quarter of 1965 they took about two-fifths of all funds raised by international bond issues and they account for about half the amount announced so far this year."

In *Barron's* of February 7, 1966 we read:

"... On the Continent interest rates have climbed by fully one-half a percentage point, from the 6% incurred by American Cyanamid last fall to the 6½% which Avon Products, calling on the gnomes of Zurich, had to pay the other day. Some U.S. concerns — Honeywell for one — have settled for less money than they wanted, while others — American Radiator & Standard Sanitary — have found the terms wholly unacceptable. Since last winter, when U.S. industry bowed to the 'voluntary' guidelines, it has succeeded in tapping the European capital market for the equivalent of over half-a-billion dollars."

No statistics are available on outflows of capital from Canada for investment in such U.S. corporate issues. The former Ontario Liberal Leader, Andrew Thompson, charged in February, 1966 that a large drain of Canadian capital was indeed taking place. However, at the time of his charge there was no evidence of this and federal officials insisted that no more than a trickle was involved.

The European issues have become increasingly attractive with their higher yields and features for conversion into common stock. Under these circumstances, it became inevitable that Canadian financial institutions would do some shifting into higher yield Eurodollar debentures, though the extent of such Canadian investments in Europe remains undetermined. The need to keep capital in Canada in the face of U.S. restrictions was considered sufficiently great, however, that Mitchell Sharp, on March 16, 1966, made his first move to discourage these outflows by establishing the first official Canadian guideline.

In Europe there has been a tightening as well, resulting in a mixture of resentment and concern. No one really knows the size of the pool of available investment funds abroad — particularly the dollar pool. The European market has already absorbed a great deal more than was thought possible. Early in March 1966, well over \$500 million had been raised on that continent and a dozen more issues were in the pipeline for an estimated \$225 million in the next few months. In some quarters, resentment reached the point that control and restrictions were proposed. The market has become increasingly inaccessible for European borrowers themselves, who were at the same time effectively cut off from New York.

EVALUATION OF U.S. MEASURES AND THEIR IMPLICATIONS

Global Implications

The U.S. guidelines are likely to have some important *global implications*, which have as yet received little or no attention. It is obviously the intention of the U.S. government to bring its international payments roughly into balance and, if possible, to incur a surplus to recover some of the gold losses of past years. This can be expected to have some serious repercussions throughout the Western World. Past deficits in the U.S. payments balance have been a very important source of international liquidity in financing world trade. This source of liquidity will now dry up if the U.S. guidelines are successful. This may well have repercussions in international trade and world prosperity, unless the International Monetary Fund and the western nations in general can come up with a solution to the inadequacy of international liquidity in the future. There can be no doubt that Canada would be seriously hurt if world trade failed to remain the dynamic force it has been in past years.

This is not to suggest that the United States should not attempt to balance its international accounts, but rather that, if a balance obtains, every effort should be made to find some alternative to U.S. deficits to ensure adequate international liquidity. In fact, it is crucial that the United States reduce its chronic deficits, because sooner or later its gold position would become critical enough to upset the appellation of international finance even more seriously.

If it is reasonable to assume that the United States will succeed in balancing its accounts, a

general scarcity of capital and liquidity may well present western countries with a problem of deflation rather than the inflation they have been worried about for so many years — and which preoccupies the United States and Canada today.

Implications for Canada

Canada is the only country excluded from the *Interest Equalization Tax* (as long as its foreign exchange reserves are not in excess of US \$2.6 billion.) This exemption is an important safeguard against a potential weakening of the Canadian dollar. The \$2.6 billion restriction does not unduly affect our scope for management of the money supply as has been suggested. Furthermore, under the present and probable future circumstances the likelihood of a chronic swelling of Canada's foreign exchange reserves is quite remote, though the Canadian government had to force these reserves down somewhat during 1966.

The Governor of the Bank of Canada said in his Annual Report:

"Though we naturally had to take the agreement regarding reserves into account, we were able to pursue a monetary policy which in its broad lines was appropriate to the requirements of our domestic situation as it developed. . . . The limitation of our foreign exchange reserves embodied in the agreement is an undesirable feature from a Canadian point of view but from the United States point of view it is an essential one."

As for the business guidelines, it is impossible to predict their impact, especially as they apply on a world-wide basis. However, the following points are worth considering.

- (1) A growing country like Canada needs more money than it has in domestic savings to finance its expansion. The major effect of the guidelines is likely to be scarcer capital, but at present it is impossible to say how much. To the extent that we have experienced some inflationary pressures this in itself need not be as harmful as it appears. As it has turned out, Canada had ample access to long-term U.S. capital during 1965 and 1966.
- (2) In all guidelines the U.S. has suggested that it is desirable to give special consideration to underdeveloped countries, *Canada*, Japan and the United Kingdom by avoiding undue strain on these countries. This suggestion is in reference to a company's flexibility with regard to individual countries as all the guidelines apply to its position with the rest of the world. In March, 1965, Mr. J. L. Robertson of the Federal Reserve System said:

"... You will presumably avoid any cut-back that would inflict a serious burden on less developed countries . . . or such developed countries as Canada or Japan . . . and the United Kingdom . . ."

- (3) There is no doubt that the guidelines are directed especially at Western European countries and the effects are likely to be felt most in those countries.
- (4) On an individual basis, those companies which have subsidiaries in the early stages of development will be hurt much more than those with more established subsidiaries.

Canada has predominantly established subsidiaries which generate significant savings in Canada and so depend relatively little on new capital from the parent company.

- (5) It is difficult to see U.S. companies failing to expand in Canada if it is to their advantage from a business standpoint. Presumably this would be accomplished by reinvestment of earnings and more borrowing in the Canadian capital market than before the introduction of the U.S. guidelines. Yet, in 1965 and 1966 there was no evidence of a decline in foreign direct investment. In fact, in both years such investment was above average. At the same time, there was increased borrowing in the Canadian capital market. This clearly reflected the high level of investment activity in the country.
- (6) The important and rapidly expanding automobile industry in Canada has been specifically exempted to the extent this industry is committed to expansion under the Automotive Free Trade Agreement. In December, 1965, Secretary of Commerce, John T. Connor said:

"... we realize that United States companies partly because we did not ask for restraint in 1965, have under way firm investment commitments in Canada (e.g., those incurred under the U.S.-Canadian automotive parts agreement) which they will find it necessary to carry out . . . we are certain they would want to give them the highest priority."

The guidelines regarding non-bank financial institutions are very important to Canada. If Canada did not have an exemption in this area it would be in serious trouble in financing its balance of payments, because these are the institutions through which the bulk of Canadian borrowing in the United States is conducted. It should be noted that if this exemption is lost, Canada cannot obtain more than the guideline limit allows even if it were willing to face the interest equalization tax. This is a vital fact that was

overlooked both by the Canadian Chamber of Commerce and by W. Earle McLaughlin, chairman and president of the Royal Bank of Canada, when they said Canada should give up its exemption from the interest equalization tax to obtain freedom regarding the level of our foreign exchange reserves.

The main lesson Canada is learning from the U.S. guidelines and their effects appears to be that Canada will have to make some serious efforts to tidy up its own international accounts. It is quite probable that Canada will be in a position to continue as a large "importer" of U.S. capital. This only means that there is no need to bring about a balance or especially a surplus on current account. It has become clear, however, that it is no longer sound (if ever it was) to run the very large *and growing* deficits on current account we have.

The cards are stacked against Canada reducing its deficit on non-merchandise transactions, which presently is about \$1.2 billion. At best it is to be hoped that this deficit can be kept from rising through improvement primarily in the tourist account and, to a lesser extent, in freight and shipping as well as business services.

This means that Canada's only scope for lasting improvement is limited to merchandise trade, both increased exports and less dependence on imports. This need points directly to the necessity of making substantial gains in productivity, of maintaining relative price stability and of promoting trade. The fact that U.S. subsidiaries in Canada loom very large in our total import picture and will be a crucial factor in our future success in promoting exports is clearly reflected in Canada's own guidelines to these firms.

Final Observations

Canada's basic balance of payments with the U.S. as well as other countries poses an interesting dilemma in the face of the U.S. guidelines. The Canadian debate on foreign investment and control in the Canadian economy has been rather critical of Canada's reliance on foreign equity investment, and many have urged a reversal of this process through a buying-back-Canada approach or, at the least, by stopping further take-overs and inflows of direct investment for expansion. There is no evidence for potential improvements in Canada's non-merchandise account of a sufficient magnitude to eliminate the dependence on foreign capital.

Presumably, then, there would be two alternatives:

- (1) to rely exclusively on non-equity capital inflows (which are already dominant) to balance the books. Also, if Canada wanted to buy back into

foreign-controlled enterprise, it might be necessary to borrow even more heavily abroad and to channel domestic savings into industry only;

- (2) to make an all-out effort to create large trading surpluses through greatly increased exports with less dependence on wheat to do the job, and to reduce the need for a vast and rapidly growing volume of imports.

The U.S. guidelines are the very instrument by which Canada is given an opportunity to realize the first objective, though it remains very doubtful whether it will be feasible to buy back much foreign enterprise. Instead, concern in Canada about the original guidelines would seem to imply that Canadians prefer to have no interference with the very process of increasing foreign control in industry which they are supposed to be so anxious to minimize.

As Bruce Hutchison said on March 1, 1966, in the *Globe and Mail*:

"Hence we must soon grapple with a further series of questions that may well mean life or

death for the Canadian nation. How much extra capital can we raise within Canada by our own savings? How much U.S. capital do we really need to assure the growth that in turn will assure prosperity and prevent internal disunity? How much foreign investment and debt can we afford to accept? How much capital can we be sure of getting from our neighbour over the next decade? Above all, how shall we use that capital — for sound, self-liquidating economic development or merely to pay our annual grocery bill?

"If they are honest the politicians who ask us to curtail U.S. investment and economic penetration overnight lest we sell our birthright and lose our independence are bound to answer a simple question: What will happen to the Canadian nation if it arrests economic growth and drastically impoverishes itself?

"The answer surely is that a nation so impoverished, unemployed and desperate will first fall to quarreling within itself and then, unable to solve its own problems, will lose hope and finally seek admission to the United States. A national policy of self-containment and economic isolation from the United States will not underwrite but will undermine Canadian independence in the end."

LEADING INDICATORS

		1965	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.
LEADING INDICATORS															
Average Weekly Hours Worked in Manufacturing		41.1	41.2	42.0	41.0	41.4	41.1	40.9	40.5	40.4	40.6	40.9	40.6		
New Dwelling Unit Starts		3,878	4,752	4,714	5,237	4,519	4,400	3,757	4,287	3,619	3,460	3,233	3,756	3,903	3,616
\$ Million		3,005	3,014	3,103	2,996	3,123	3,141	3,092	3,088	3,086	2,927	3,167	3,007	3,141	
Housing Contracts		54.8	64.7	52.2	46.0	48.9	72.4	48.6	52.4	42.7	51.5	58.3	52.4	80.5	40.8
Business, Industrial and Engineering Contracts		101.6	95.4	122.8	106.1	146.6	213.6	114.4	131.3	103.1	114.8	148.2	120.7	128.7	113.2
Money Supply*		19,724	19,766	19,789	19,813	19,879	20,014	20,169	20,176	20,118	20,353	20,632	20,812	21,044	21,190
S.E. Industrial Index 1956=100		172.4	168.9	168.8	169.1	169.1	166.4	164.1	158.9	162.2	162.5	150.0	144.0	147.2	148.1

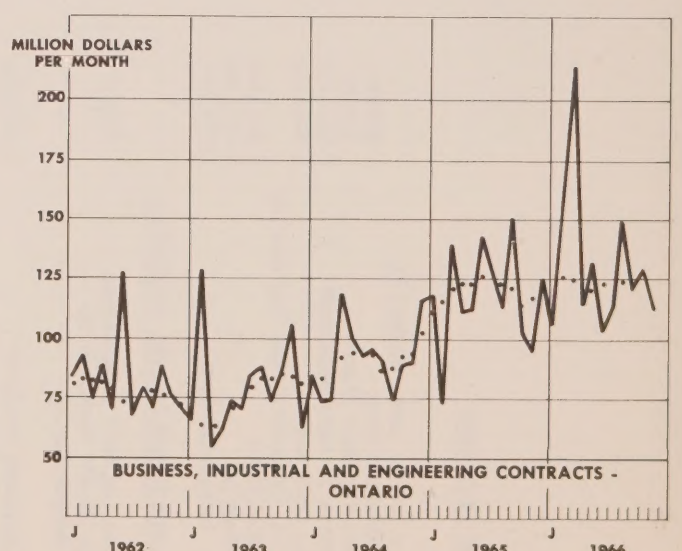
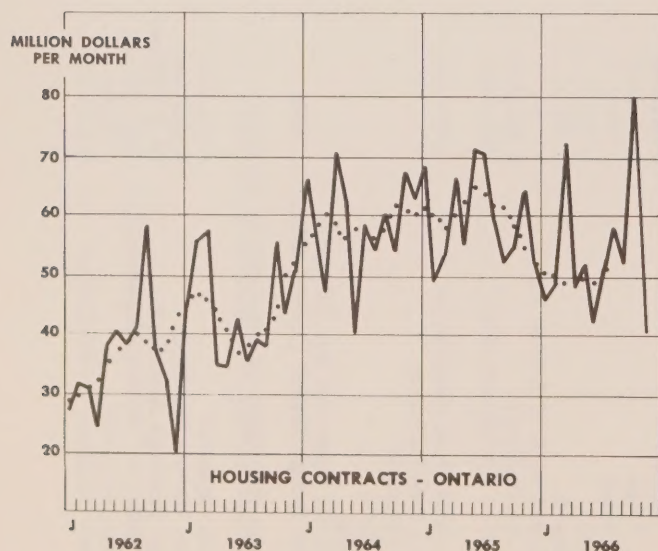
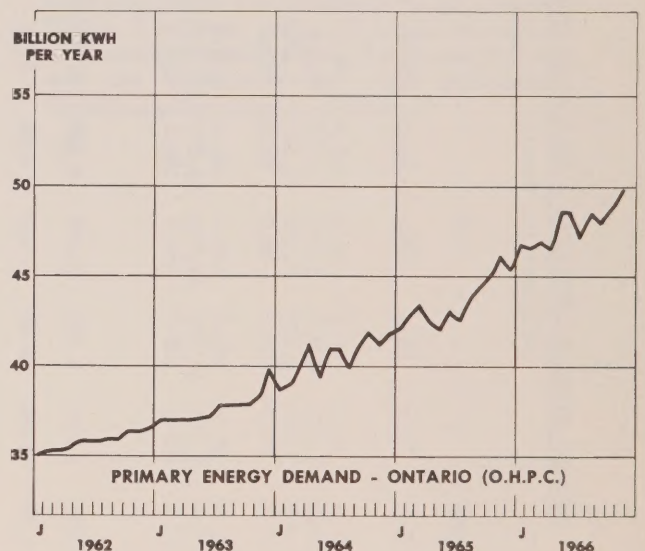
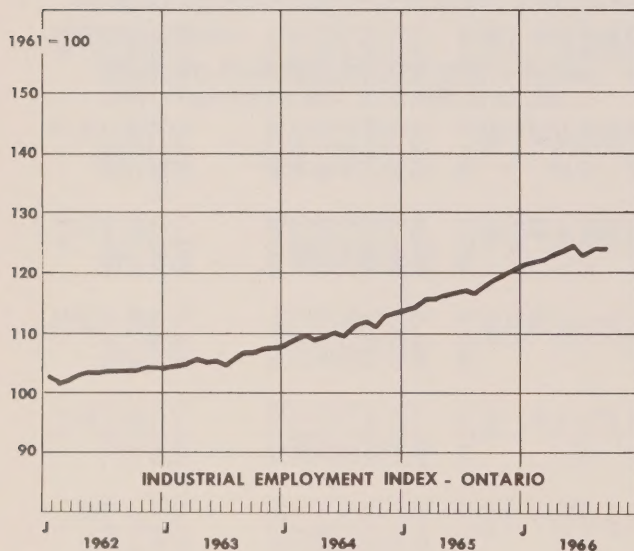
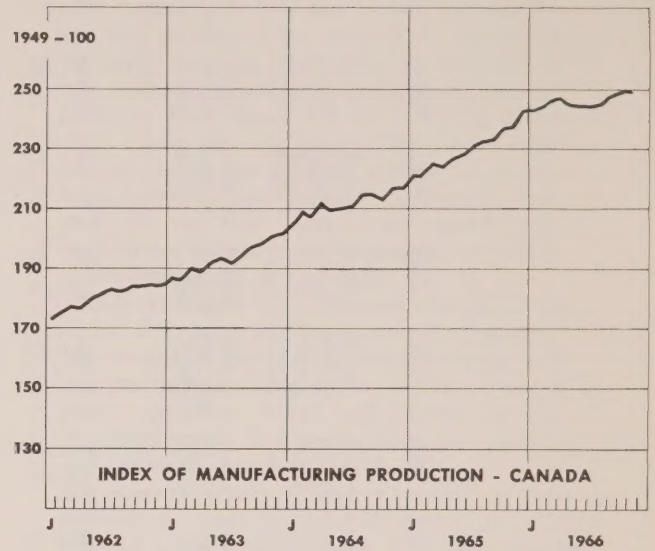
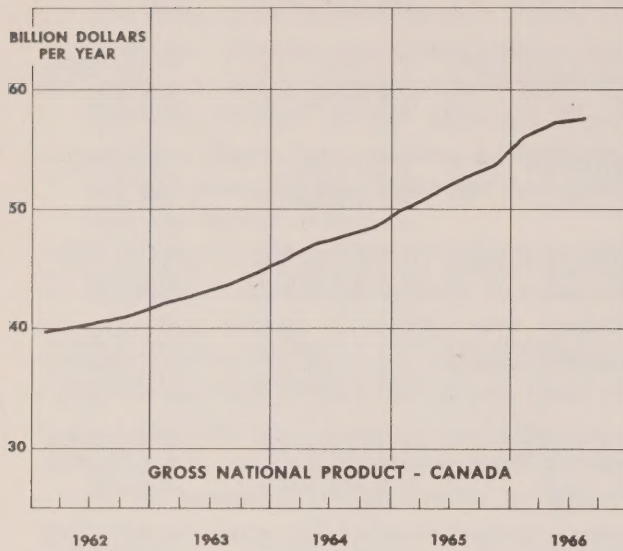
COINCIDENTAL AND LAGGING INDICATORS

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ECONOMIC INDICATORS NOT SEASONALLY ADJUSTED

	\$ Million	772.2	898.0	796.7	722.9	674.5	768.7	753.2	910.0	834.5	833.2	925.2	875.4	878.6
Domestic Exports*	\$ Million	763.6	895.3	786.9	706.8	667.9	830.7	775.0	914.0	901.7	737.0	808.8	803.4	920.0
Imports for Consumption*	\$ Million	2,644	2,681	2,665	2,562	2,548	2,510	2,469	2,412	2,342	2,315	2,281	2,244	2,223
Foreign Exchange Reserves*	US \$ Million	259.3	259.4	261.3	265.4	268.1	264.6	264.7	264.2	263.0	262.4	260.6	258.9	257.8
Price Index of Industrial Materials*	1935-39=100	79	76	61	70	79	80	75	73	90	56	58	63	56
Business Failures - Liabilities	Number	2.7	3.4	3.8	3.2	7.0	4.7	10.0	5.5	6.5	2.5	7.9	2.9	2.0
Business Failures	\$ Million	2.7	3.4	3.8	3.2	7.0	4.7	10.0	5.5	6.5	2.5	7.9	2.9	2.0

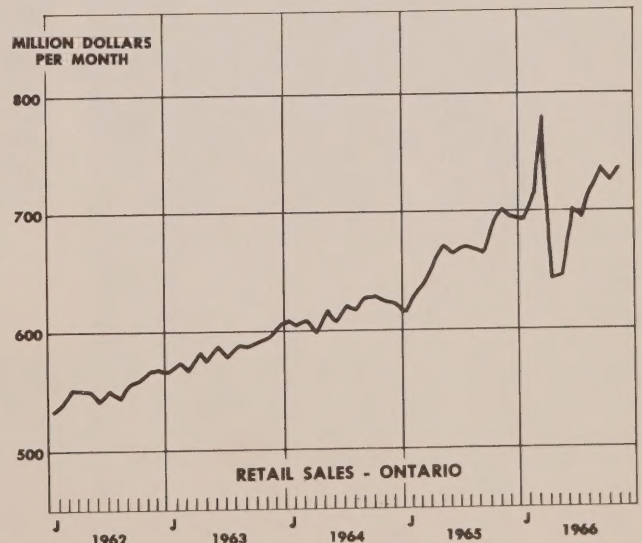
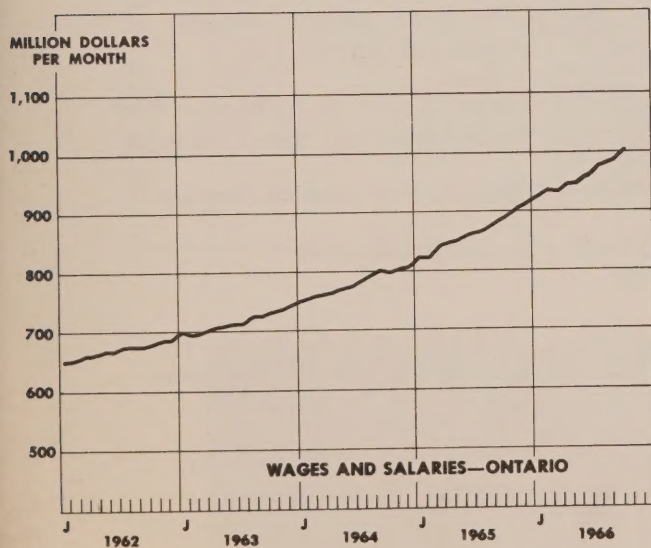
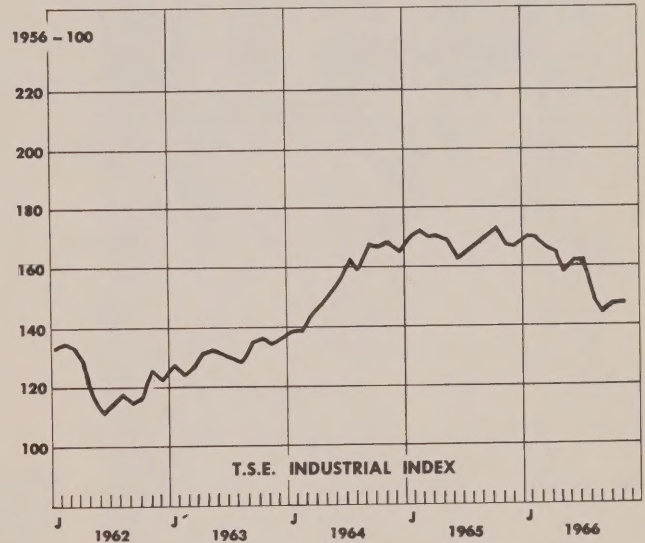
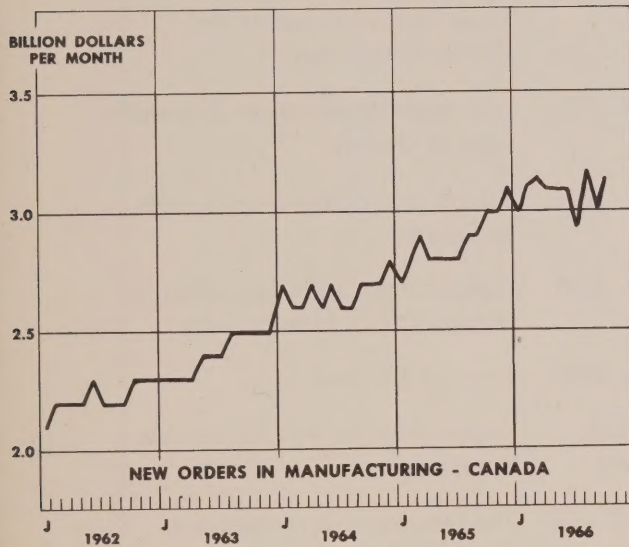
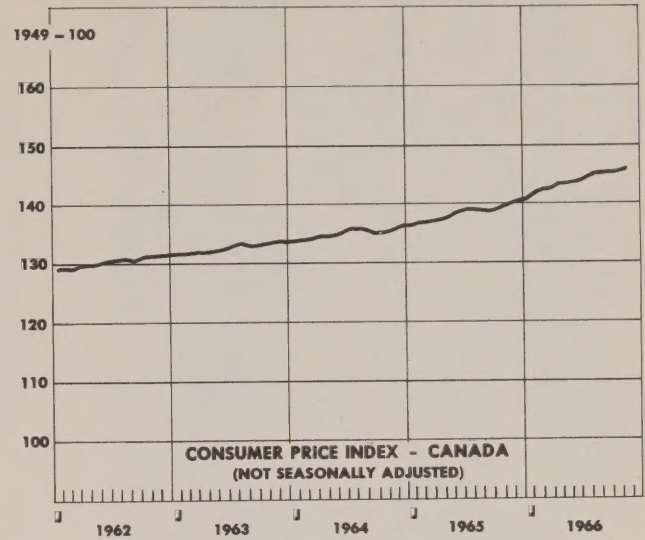
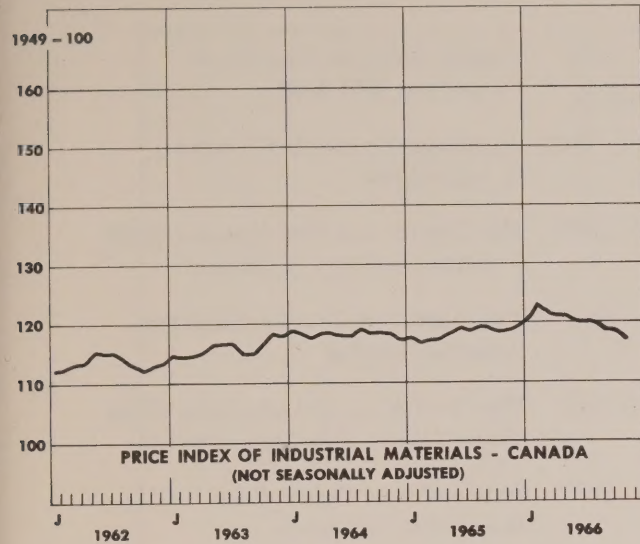
ECONOMIC INDICATORS—SEASONALLY ADJUSTED



..... TREND CYCLE

— SEASONALLY ADJUSTED MONTHLY FIGURES

ECONOMIC INDICATORS—SEASONALLY ADJUSTED



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